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THE EFFECTS OF AN EDUCATIONAL INTERVENTION ON THE AGING KNOWLEDGE
OF GRADUATE COUNSELING STUDENTS

by

Damien Gent Dotson

B.S., University of North Alabama, 2002

M.A., University of North Alabama, 2005

A Dissertation

Submitted in Partial Fulfillment of the Requirement
for the Doctor of Philosophy Degree in Rehabilitation Counseling

Rehabilitation Institute

Southern Illinois University at Carbondale

Carbondale, Illinois

May 2012

DISSERTATION APPROVAL

THE EFFECTS OF AN EDUCATIONAL INTERVENTION ON THE AGING KNOWLEDGE
OF GRADUATE COUNSELING STUDENTS

By

D. Gent Dotson

A Dissertation Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Doctor of Philosophy

in the field of Rehabilitation Counseling

Approved by:

D. Shane Koch, Rh.D, CRC, CSADC, AADC, Chair

John Benshoff, Ph.D., CRC

Sharon J. Davis, Ph.D., CRC, LCPC

Jonathan Baker, Ph.D.

William Crimando, Ph.D.

Graduate School
Southern Illinois University Carbondale
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AN ABSTRACT OF THE DISSERTATION OF

Damien Gent Dotson, for the Doctor of Philosophy degree in Rehabilitation Counseling,
Presented on June 24th 2011, at Southern Illinois University at Carbondale.

**TITLE: THE EFFECTS AN EDUCATIONAL INTERVENTION ON THE AGING
KNOWLEDGE OF GRADUATE COUNSELING STUDENTS**

MAJOR PROFESSOR: D. Shane Koch, Rh.D., CRC, CSADC, AADC

The purpose of this study was to test the effects of an educational intervention on the aging knowledge of graduate counseling students. Overcoming misconceptions, such as positive and negative stereotypes about older adults, is essential for graduate counseling students to be effectively trained to work with the aging population. Educational interventions have been found to be the most consistently effective way of increasing aging knowledge and helping individuals overcome ageist beliefs rooted in faulty aging knowledge. For this study, it was hypothesized that a comprehensive educational intervention (approximately 2 hours in duration) would increase overall aging knowledge, increase aging and mental health knowledge, and lower levels of negative aging bias; moreover, this study hypothesized that adding a structured discussion (approximately 20 minutes in duration) after the educational intervention would further increase overall aging knowledge and overall aging and mental health knowledge and further reduce levels of negative aging bias. In addition, it was hypothesized that students who received the educational intervention or the educational intervention with structured discussion would be better able to process three exploratory aging related vignettes than the group of students who received no educational intervention.

The findings of this study suggest that the use of an educational intervention alone may not be enough to increase overall aging knowledge, increase aging and mental health knowledge, and decrease negative aging bias among graduate counseling students. However, it does appear that adding a structured discussion to an educational intervention is an easy way to produce

superior results. In addition, it does not appear that using a short-term educational intervention, with or without structured discussion, is enough to impart the level of aging knowledge to graduate counseling students for them to be able to do more complicated tasks, such as processing an aging related vignette using factual knowledge.

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

Preparing the next generation of counseling professionals represents a significant challenge to rehabilitation educators. The sheer number of the emerging cohort of older adults, known as the Baby Boomer generation, will help push the overall population of individuals aged 65 and older to an incredible 72 million people (constituting 20 percent of the total U.S. population) by the year 2030 (Federal Interagency Forum on Aging-Related Statistics, 2008). This reality will call for a dramatic increase in the need for rehabilitation professionals of all educational backgrounds, including those trained to work with mental health related disabilities, substance use disorders, physically disabling conditions, and those disabilities that co-occur, or present in ways that are connected and/or interrelated in both cause and effect.

Ageism is a key factor in preventing counseling professionals from entering into careers that involve working with older adults (Rosowsky, 2005). Narrowly defined, ageism is similar to other “-isms,” such as sexism and racism, because younger groups of people use stereotyping, prejudice, antilocution, avoidance, and discrimination when interacting with aging individuals (Butler, 2006; Bytheway, 2005; Rupp, Vodanovich & Credé, 2005). However, broadly defined, ageism differs from other forms of prejudice and discrimination because it focuses on how people vary as a result of the aging process, which applies to everyone regardless of other differences such as sex or ethnicity. This means that we all face the possibility of experiencing ageism at some point in our lives. Examples of ageist beliefs that researchers have found to be prevalent include the following: many older people are angry and stingy; older people should not be trusted to take care of infants; interesting conversations are not possible with older people;

older adults should be separated from younger people so that they do not bother anyone (Rupp et al., 2005). While such ageist beliefs are obviously prejudice and discriminatory in nature, it should not be assumed by rehabilitation educators that individuals enrolled in graduate level counseling courses do not have such beliefs and therefore do not need educational interventions and/or training designed to change such ideas.

Background of the Problem

Aging Population

By the beginning of the 21st century, trends in life expectancy had changed drastically from the previous century. During the early 20th Century, life expectancy increased due to reductions in mortality of younger individuals, with life expectancy rising from 47.3 years of age in 1900 to 68.2 years of age in 1950; however, because of the reductions in mortality of older individuals, life expectancy reached an all-time high of 76.9 years of age by 2000 (He, Sengupta, Velkoff, & DeBarros, 2005; National Center for Health Statistics, 2007). Additionally, in recent decades, developments in disease prevention, such as cancer screenings, vaccinations, diet, and physical activity, coupled with improvements in the treatment of chronic illnesses, such as heart disease, have caused a further reduction in the mortality rate of older individuals, resulting in longer life expectancies for individuals in the future (Federal Interagency Forum on Aging-Related Statistics, 2008; He et al., 2005). A person born in the United States at the turn of the 20th Century could have expected to only live to around the age of 47, and in 1900, the population of seniors (persons 65 years of age and older) numbered 3.1 million; however, throughout the 20th Century, the senior population was the largest expanding population in the United States, with the growth of the older population far surpassing the growth of other age groups (He et al., 2005; U.S. Bureau of Census, 2000). In 2000, the senior population in

America included 35.0 million people, and with the advantages in health care, researchers projected that this population would continue to grow (He et al., 2005). Anyone who plans to work in any professional field should expect to deal frequently with older individuals; therefore, professionals in all fields should be equipped with the knowledge and skills to successfully care for the needs of this growing population.

Current Aging Cohort. The current aging cohort was made up of two aging populations: a younger aging population, known as the Silent Generation (individuals born between 1925 and 1945), and an older aging population, known as the G.I. Generation or the Greatest Generation (individuals born between 1901 and 1924) (Egri & Ralston, 2004; Strauss & Howe, 1991; Thau & Heflin, 1997). Because individuals in these generational groups came of age during times that demanded great sacrifice, namely the Great Depression and World War II, they developed conservative spending habits, which demonstrated their need for security; as they aged, they became more conservative (Egri & Ralston, 2004; Strauss & Howe, 1991; Thau & Heflin, 1997). For example, as individuals in this cohort entered into their 50s, they began saving more and spending less, which reflected their desire to age in a secure world where they could avoid the dangers and catastrophes that they experienced during their early years (Hung, Gu, & Yim, 2007).

The current cohort was conservative in moral matters as well. The ultra-conservatism of the 1950s was a reflection of this groups' belief-system since a majority of the individuals in the current cohort were young and middle-aged adults in that decade (Sutherland, Poloma, & Pendleton, 2003). These individuals not only respected the authority of the government (demonstrated by their extreme patriotism and support of the "American way"), but they also respected the authority of traditional religion, which resulted in the large surge of church

construction and growth during the 1950s (Gronbach, 2008; Sutherland et al., 2003). Along the same lines, during the 1950s, church attendance reached new heights (Sutherland et al., 2003). These individuals attended church, and they took their children with them; as a matter of fact, as children, 95 percent of Baby Boomers (people born between 1946 and 1964) participated in some form of traditional religious services during the post-war years (Sutherland et al., 2003). It is no surprise that as the current cohort of seniors aged they continued to cling to conservative values.

Emerging Aging Cohort. The emerging cohort of aging individuals differed from the current cohort in many ways. First, the emerging cohort was much larger than the current cohort. The emerging cohort primarily consisted of the Baby Boom generation, which was the largest generational cohort in American history (Egri & Ralston, 2004; Strauss & Howe, 1991, Thau & Heflin, 1997). In 2011, this group of individuals began to turn 65; according to U.S. Census Bureau projections, with Baby Boomers entering the 65 and older age bracket, the senior population was expected to increase substantially during the years 2010 to 2030 (He et al., 2005; Miller & Rehr, 2005). By 2010, 35 million people, or 1 in 8 Americans, were projected to be 65 years or older, and by 2030, the senior population was projected to double what it was in 2000, reaching 72 million people, or 1 in 5 Americans, and representing nearly 20 percent of the total U.S. population (Federal Interagency Forum on Aging-Related Statistics, 2008; He et al., 2005).

Not only was the Baby Boomer cohort of aging individuals expected to be larger than the current aging population, it was also expected to be the healthiest aging cohort in American history, and therefore, people in this cohort were expected to live longer than the current group of seniors (Czaja, 2006). The longer life expectancy of this future cohort will influence the aging population further. With Baby Boomers living longer, the U.S. Census Bureau projected an

increase in the future population of “the oldest-old” (individuals aged 85 and older) (He et al., 2005, p.11). In 2003, there were 4.7 million people aged 85 or older in the United States, and the Census Bureau projected the number of the oldest-old to double to 9.6 million people in 2030 (He et al., 2005). Furthermore, the Census Bureau projected that 9 million (or one in nine) of the 80 million Baby Boomers would endure into their late 90s, and 3 million (or 1 in 26) would live to be 100 years of age (Population Reference Bureau, 2006). By 2050, when a majority of Baby Boomers move into the oldest-old age group, the oldest-old population is expected to double yet again to 20.9 million people, accounting for 24 percent of the aging population (or nearly 1 of every 4 older people) (He et al., 2005).

In addition to living longer, the Baby Boomer population was also more liberal than the current cohort in both spending habits and belief systems. First, in contrast to the current aging cohort, the Baby Boomers came of age during the period that followed World War II; the 1950s and 60s were periods of unprecedented prosperity for Americans (Egri & Ralston, 2004). Because of their reasonably affluent upbringing, Boomers developed more consumerist patterns than their parents, and unlike their parents, they maintained their spending habits in later life, continuing to spend and take out loans after they entered the 50-year-old age bracket (Hung, Gu, & Yim, 2007). While the research is not yet clear as to how the large recession that started near the end of 2007 affected Baby Boomer spending habits, like all other Americans, many members of the emerging cohort of older adults will have to reconsider previous thoughts in regards to wealth in retirement. In a recent article in the journal *Generations*, W. Andrew Achenbaum stated “like a growing number of boomers my new expectation [is] that I [will] never retire unless or until I become incapacitated. ... Would my retirement nest egg ever again be sufficient to underwrite the lifestyle I had expected to enjoy?” (Anchenbaum, 2009, p. 95-96). Baby

Boomers' more liberal spending habits may need to be reassessed; as more data about the recent recession emerges, this characteristic of the future aging cohort may change.

Another difference between the current and emerging cohorts was found in the way the two identify and participate in religious and social matters; the emerging cohort was more liberal in religious and social matters. Although a majority of Baby Boomers participated in church when they were children, they began to redefine themselves as they entered their teens and early twenties. During the mid-1960s, the Boomers began questioning their parents' ideologies and breaking from traditional, institutionalized beliefs, choosing instead a more individualistic form of spirituality, which combined elements of Eastern religion, meditation, Native American practices, and drugs (Sutherland, Poloma, & Pendleton, 2003). Furthermore, their privileged circumstances allowed the Baby Boomer generation to focus their time on societal concerns and participate in the radical social changes that occurred during the 1960s and 70s, such as the Civil Rights movement, the women's movement, and protests against the Vietnam War (Egri & Ralston, 2004; Strauss & Howe 1991). Green (2003) proclaimed that as these individuals started to reach their late sixties, they did not adhere to their parents' religiosity and spirituality, they chose instead to hold fast to their consumerist habits by seeking products and services that empower, such as communication tools, motivational programs, and educational travel.

Another way the emerging cohort of aging individuals differed from the current cohort was the way in which they approached aging. According to Rosowsky (2005, p. 57), as the Baby Boomer generation moved into the 65 years and older age bracket, they were not "as passively accepting of the 'vicissitudes' of aging" (p. 57) as their parents were. Overall, this cohort was better educated than the current group of individuals 65 years and older, but more importantly, in

comparison with their parents, Baby Boomers were more proactive consumers of healthcare; they were more likely to educate themselves on aging issues, which resulted in higher skepticism of aging stereotypes (Miller & Rehr, 2005). Moreover, the fact that this cohort has reinvented the connotations associated with every age bracket into which it moved, made researchers believe that these individuals will also strive to redefine what it means to be “old” (Rosowsky, 2005; Green, 2003). Baby Boomers have already coined phrases, such as “50 is the new 35,” which attempted to differentiate the image of middle-aged Baby Boomers from the image of their aging parents, and as they have entered the aging population, they have created new phrases, such as “70 is the youth of old age” in an obvious attempt to distinguish themselves from the stereotypes of their senior parents (Rosowsky, 2005, p. 57). As a matter of fact, Baby Boomers were so obsessed with aging differently than their parents (or aging less and possibly not aging at all) that market researchers predicted more growth in the already booming anti-aging industries (Green, 2003). Plastic surgery, nutraceuticals (designer nutritional supplements known to alleviate the effects of aging), cosmeceuticals (designer cosmetics infused with antioxidants), physical aids, such as invisible bifocals and hearing aids, that simultaneously control and hide the appearance of aging disabilities, and other businesses promoting products and services designed to help Baby Boomers deal with the effects of aging were some of the businesses considered most likely to become extremely successful in the upcoming years because of marketers’ beliefs that the Baby Boomers’ had a strong desire to mitigate the consequences of growing old (Green, 2003).

The last difference between the two cohorts was the way in which each group approached mental health. Baby Boomers were known for overcoming many of the stigmas associated with counseling, support groups and other mental health services; therefore researchers projected that

this group will continue to be consumers of mental health services as they age (Green, 2003).

Moreover, researchers projected that the Baby Boomers will continue to look for service providers that promote the acquisition of more youthful, optimistic mental health in an attempt to overcome or come to terms with the changes occurring in their aging bodies (Green, 2003).

Ageism

History and definition of ageism. Although ageist beliefs have been prevalent in American society for quite some time, ageism has been a relatively new idea (Bytheway, 2005; Cohen, 2001). The concept of ageism first appeared in Max Lerner's 1957 book, *America as a Civilization*, but the term "ageism" was not coined until 1969, when psychiatrist, Robert Butler, used it to explain why Washington, D.C. citizens opposed the construction of public housing for older people (Bytheway, 2005; Cohen, 2001). Narrowly defined, ageism has been a process of systematic stereotyping, prejudice, and/or discrimination against a category of people based on their age (Butler, 2006; Bytheway, 2005; Palmore, 2001). According to this narrow definition, ageism has been similar to other "-isms," such as sexism, which disadvantages and oppresses women, and racism, which disadvantages and oppresses minority ethnic groups, because younger groups of people have used stereotyping, prejudice, antilocution, avoidance, and discrimination when interacting with aging individuals (Butler, 2006; Bytheway, 2005; Rupp, Vodanovich, & Credé, 2005). According to Bytheway (2005), ageism's effect on older individuals manifested itself through discrimination and prejudice based on a person's chronological age and his/her body image. For instance, society has discriminated against older individuals by including age bars in insurance plans that make policies available only to adults under the age of 65 and by formally rejecting the images of older individuals in advertising, and society's prejudice against

the aging population has been demonstrated by the inclusion of age in the calculation of statistical priorities and by the avoidance of older individuals at social events (Bytheway, 2005).

However, the narrow definition of ageism does not take into account the complicated nature of this concept. Expressions of ageism have ranged from subtle to overt, and both formally and informally affect systems and individuals (Rosowsky, 2005). In a broader context, Bytheway (2005) defined ageism as “a set of beliefs about how people vary biologically as a result of the aging process” (Bytheway, 2005, p. 339). This broader definition included how this set of beliefs has generated and reinforced a lifelong fear of the aging process, how the fear of aging has lead individuals to unconsciously project presumed associations between age and competence onto other age groups, and how such projections have underpinned the actions of individuals and organizations towards different age groups (Bytheway, 2005; Terry, 2008). In this context, ageism differed from other forms of prejudice and discrimination in two ways; for one, every person (no matter their sex or ethnic background) may become a target of ageism, and second, because ageism has been a relatively recent and subtle concept, many people have been unaware of its existence and implications on society (Bytheway, 2005; Palmore, 2001; Terry, 2008). The broader definition portrayed ageism as a double-sided phenomenon, with younger people projecting beliefs about older individuals (to rationalize their fears of aging) and older people projecting beliefs about younger individuals (to diminish their fears of becoming helpless and dependent) (Terry, 2008). Moreover, unlike racism and sexism, ageism has not been brought to the public’s consciousness through extensive media attention or a massive social action campaign; therefore, individuals have been unconscious of their ageist beliefs and such beliefs have been more difficult to detect because these views have been inadvertently woven into the very thread of our society (Bytheway, 2005; Rupp, Vodanovich, & Credé, 2005). For

example, ageism has not only included the negative assessments of an individual's capacity based on his/her age, it has also included the dismissive or absolving attitudes, known as "benign or compassionate ageism" (Hendricks, 2005, p. 5). Many of the positive stereotypes about age groups (especially those held about older individuals) have been as dehumanizing as the negative stereotypes because in both cases people have been placed into extreme categories that result in invisibility of the individual (Hendricks, 2005). Although the broader definition of ageism has proven to be complicated, the implication of this broader definition on mental healthcare and rehabilitation services for the aging population has been simple: the dominant expectations about age dictated how mental healthcare and rehabilitation workers (usually younger) and clients (usually older) behaved and related to each other (Bytheway, 2005).

Ageist beliefs towards aging population. Ageism has manifested itself in ageist discourse, age discrimination, and faulty ageist beliefs, expressed through verbal and non-verbal language rooted in intentional and non-intentional biases of aging and aging persons (Rupp et al., 2005). Various prejudice behaviors, such as the antilocution and avoidance of older persons, have been prevalent characteristics of ageist practices based on ageist beliefs (Rupp et al., 2005). Some examples of antilocution expressed by younger people included the following beliefs: "Many old people are stingy and hoard their money and possessions"; "Most old people should not be trusted to take care of infants"; "Teenage suicide is more tragic than suicide among the old"; and "Complex and interesting conversation cannot be expected from most old people" (Rupp et al., 2005, p. 345). Some examples of avoidance included the following beliefs: "It is best that old people live where they don't bother anyone"; "There should be special clubs set aside within sports facilities so that old people can compete at their own level"; and "I don't like it when old people try to make conversation with me" (Rupp et al., 2005, p. 343-345).

A study by Palmore (2001) found that ageism was perceived as frequent and widespread in the majority of older respondents surveyed. In fact, over 77 percent of the older adults (aged 60 and older) in his study ($N=84$) reported experiencing ageism “one or more times,” with more than half of the respondents reporting incidents that had occurred “more than once” (Palmore, 2001, p.573). Ageist events that occurred varied from the more benign, such as being told a joke that made fun of older people, to more serious events, such as being treated with less dignity and respect, being ignored, and being denied employment, promotion and medical care (Palmore, 2001). In addition, Healy (1993) and Palmore (1999) contended that ageism has been a major problem that needed to be both confronted and overcome. McNeely and Cohen (1983) noted that one major problem in combating ageism was the fact that many older individuals have seen age-related discrimination as coming from other causes such as minority backgrounds, ethnicity, or gender. According to Macdonald and Rich (1991), women have at times misinterpreted ageism as sexism. Moreover, Atchley (1994) contended that white males, who have experienced ageism in the work place, have felt that they were targeted not because of their age but because their skills were outdated.

Although this research pointed to widespread ageism, according to Kane (2006), past research in regards to ageism has focused more on the experiences of men. Researchers have only recently began to consider older women’s experiences with ageism, and much of the current research on women’s experiences have been founded on trait theory, which only focuses on stereotypical female traits such as emotional expressiveness, low self-esteem, interdependence connectedness, and submissiveness (Kane, 2006). Kane (2006) argued that these traditional perceptions of women needed to be challenged by post-modern, feminist appraisals of power, sexuality, and gender role expectations. Based on Kane’s (2006) research,

one could conclude that in addition to experiencing ageism in a similar way to their male counterparts, women may experience additional prejudice if they are seen to behave in a way that is outside of their supposed appropriate gender role for their age group.

Currently research on the emerging cohort's experiences with ageism is non-existent; however, one could assume that the ageist trends provided in data on the current aging cohort would have a similar effect on the emerging cohort. Moreover, that data currently available on the Baby Boom generation pointed to this cohort's obsession with aging differently than their parents, and this obsession could cause individuals in this cohort to experience a greater degree of ageism. For example, because of their need to differentiate themselves from their parents, individuals in the emerging cohort might find the positive stereotypes associated with their parents' generation (benign ageism) to be extremely offensive.

Need for the Study

Mental Health Care Needs of Aging Population

Mental Health Care Needs of Current Aging Cohort. Over the past decade, researchers have increasingly turned their studies to the causes and treatments of the psychiatric problems of older adults in the United States (Bartels et al., 2004). Researchers have found that the present cohort of older adults was one of the largest populations underserved by the current mental healthcare system, with one in four older adults having had a significant mental disorder and only three percent of this population reporting having received mental health services (Bartels, 2003; Bartels et al., 2004). Moreover, older adults were at a greater risk of receiving inadequate and inappropriate care because the current mental healthcare system was not effectively organized for the delivery and financing of mental healthcare for older individuals (Bartels, 2003). Further impacting this cohort's need for proper mental health care was the fact

that the lack of effective treatment in older individuals was associated with noteworthy impairment and disability, including “impaired independent and community-based functioning, compromised quality of life, cognitive impairment, increased care-giver stress, disability, increased mortality, and poor health outcomes” (Bartels, 2003 p. 488).

Mental Health Care Needs of Future Aging Cohort. The large number of individuals in the new cohort of aging persons greatly increased the need for mental health service providers. According to Bartels et al. (2004), by 2030, the projected number of persons 65 years of age and older who would require mental health services would exceed the number of persons in younger age groups who would require treatment for mental illness. Only 3% of the current cohort of older persons have seen a mental health provider for the treatment of mental illness; instead, because of this group’s stigma toward mental illness, they have chosen to receive mental healthcare from their primary care physicians (Bartels et al., 2004). However, because Baby Boomers have overcome many of the stigmas associated with mental illness and have sought services from mental healthcare providers; one can infer that they will continue to seek services from mental healthcare providers as they age. Furthermore, individuals in the new cohort will need a larger variety of mental health services. Drug and alcohol treatment may be particularly important for the Baby Boomer cohort, which was responsible for the dramatic increase in the use of illicit drugs during the 1960s and 1970s (Patterson & Jeste, 1999). Many individuals in this cohort have continued to use illicit drugs as they have aged, and data has shown that the prevalence of prescription medication use was higher for the emerging cohort than it was for the current cohort of older persons when they were the same age (Patterson & Jeste, 1999). With this in mind, and because of the sheer number of individuals in the Baby Boomer cohort,

researchers expected an increase for the need of treatment programs and other addiction-related resources geared toward the specific needs of older adults (Patterson & Jeste, 1999).

Implications of Ageism in Mental Healthcare Services for Older Individuals

Current Implications of Ageism. Ageist views played a major role in the lack of effective treatments for older adults with mental health disorders. First of all, there was a shortage of mental health professionals entering the geriatric services. Rosowsky (2005) stated that rehabilitation care providers of all stripes, including mental healthcare professionals (such as counselors, social workers, and psychologist) often devalued care specialties related to aging. Furthermore, when asked why they did not want to enter this field, individuals training to be rehabilitation care workers gave the following ageist responses: “Gerontology is not chic”; “Old people are not a sexy population to work with”; “Old people often have poor prognoses and respond less well to treatment”; “Old people are a poor investment in the future”; “Old age seems a painful and sad time of life, and it would be painful and sad to work with old people”; “Old age is stage of deterioration; older adults are inevitably and inexorably going to age and decline further, and clinical work with the old is like ‘shoveling sand’ against the tide” (Rosowsky, 2005, p. 56).

Not only did ageism prevent rehabilitation workers from entering into services for older individuals, it also affected the quality of care provided by mental healthcare professionals who were currently working with the aging population. Because of ageist attitudes towards older adults, older individuals were much less likely to be formally diagnosed with mental health disorders (Kaskie, Wyatt, & Imhof, 2008). As a matter of fact, only 25 percent of older adults who needed mental healthcare received any form of diagnosis that could then lead to specialty treatment offered by qualified mental health providers (Kaskie et al., 2008).

Future Implications of Ageism. Based on the previously stated findings, ageism has hindered the quantity and quality of mental healthcare provided to the current cohort of aging individuals. Therefore, one could project that ageism would obstruct the future cohort of aging individuals from receiving proper mental healthcare, but according to current research, the extent to which ageism has affected the Baby Boomers' access to proper care was not yet known. Considering this new cohort's past experiences, their current spending tendencies, their continuing need for individualism as expressed by their narcissistic investment in their stage of life, and their projected resistance to aging, one could infer that ageism could possibly have a deeper impact on this cohort than on earlier aging individuals (Rosowsky, 2005). Moreover, the sheer size of this emerging cohort would overpower the already under-staffed mental healthcare system; therefore, if ageism continued to promote the avoidance of mental health providers working with older persons in the field, the United States faced an impending public mental healthcare crisis (Bartels et al., 2004; Rosowsky, 2005).

The Role of Education in Overcoming Misconceptions about Aging

According to Palmore (1998), ageism has been rooted in misconceptions about aging; most of the misconceptions about aging represented negative stereotypes about the aged, and the most effective tool in combating negative stereotypes was education. In fact, there was consistent and reliable evidence suggesting that a person's knowledge about aging reflects his or her attitude toward older individuals; when a person had a great deal of correct knowledge about aging, he or she tended to hold more positive beliefs towards older individuals (Allen, 1981; Ausherman, 1991; Ferrario, Freeman, Nellett, & Scheel, 2008; Jones, 1993; Klemmack, 1978; Linn & Zeppa, 1987; Palmore, 1977; Palmore, 1998; Patwell, 1991). Moreover, where and how this knowledge was acquired played an important role in how a person viewed older individuals.

Numerous studies have found that contact with older individuals, such as working in a nursing home, was not enough to raise knowledge levels about aging (Allen, 1981; Knox, Gekoski, & Johnson, 1986; Koyano, Inoue, & Shibata, 1987; Miller & Dodder, 1984; Perotta, Perkins, Schimpfauser, & Calkins, 1981). According to Palmore (1998), education was the main variable that made a consistent, significant difference in overall knowledge about aging. Reasons for this included the fact that as an individual's educational levels increased, so did their general knowledge, including information about aging. Also, a person's level of education affected his or her test taking skills; educated persons had sophisticated test taking development, which led to higher scoring when given tests or quizzes to measure aging knowledge (Palmore, 1998).

Ferrario et al. (2008) argued that the role of education was to help shape attitudes and values because behavior was ultimately guided by those attitudes and values. Palmore (1991) contended that education was the most effective way of reducing prejudice and/or discrimination. According to Palmore (1991) education was defined as "the transmission of noncontroversial information or the handling of controversial topics by recognizing them as controversial, using an objective approach, and bringing all relevant facts to bear" (Palmore, 1991, p. 144). General education has proven to be an effective way to increase knowledge about aging and reduce misconceptions about older adults (Palmore, 1991). In fact, even short term education has been shown to reduce prejudice against older individuals.

Purpose of the Study

Graduate counseling students need to acquire aging specific knowledge to make them more effective when working with the increasingly growing number of older individuals. Educational interventions have been found to increase aging knowledge, reduce common

misconceptions, help create more positive attitudes toward older adults and, in some instances, increase the students' desire to work with the aging population.

The primary purpose of this study was to test the effects of an educational intervention on the overall aging knowledge of graduate counseling students. The secondary purpose of this study was to test the effects of an educational intervention on overall aging and mental health knowledge, negative aging bias and the ability to use factually based knowledge to process exploratory vignettes about situations faced by aging adults.

Research Questions

This study will seek to answer the following questions:

- 1) Will the students who receive only the educational intervention (Group B) have higher overall aging knowledge than the students who do not receive any interventions (Group A)?
- 2) Will the students who receive the educational intervention with discussion (Group C) have higher overall aging knowledge than the students who do not receive any interventions (Group A)?
- 3) Will the students who receive the educational intervention with discussion (Group C) have higher overall aging knowledge than the students who receive only the educational intervention (Group B)?
- 4) Will the students who receive only the educational intervention (Group B) have higher overall aging and mental health knowledge than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have higher overall aging and mental health knowledge than the students who do not receive any interventions (Group A)?

- 5) Will the students who receive the educational intervention with discussion (Group C) have higher overall aging and mental health knowledge than the students who receive only the educational intervention (Group B)?
- 6) Will the students who receive only the educational intervention (Group B) have lower levels of aging bias than the students who do not receive any interventions (Group A)?
- 7) Will the students who receive the educational intervention with discussion (Group C) have lower levels of aging bias than the students who do not receive any interventions (Group A)?
- 8) Will the students who receive the educational intervention with discussion (Group C) have lower levels of aging bias than the students who receive only the educational intervention (Group B)?
- 9) Will the students who receive the educational intervention (Group B) have higher overall vignette scores than the students who do not receive any intervention (Group A)?
- 10) Will the students who receive the educational intervention with structured discussion (Group C) have higher overall vignette scores than the students who do not receive any intervention (Group A)?
- 11) Will the students who receive the educational intervention with structured discussion (Group C) have higher overall vignette scores than the students who receive only the educational intervention (Group B)?

Research Hypotheses

The following null hypotheses were tested, each one corresponding to an alternative hypothesis. Alpha levels were set at .05:

- 1) Ho1: There will be no difference in overall aging knowledge between Group B and Group A.
- 2) Ha1: Students in Group B will have higher overall aging knowledge than students in Group A.
- 3) Ho2: There will be no difference in overall aging knowledge between Group C and Group A.
- 4) Ha2: Students in Group C will have higher overall aging knowledge than students in Group A.
- 5) Ho3: There will be no difference in overall aging knowledge between Group C and Group B.
- 6) Ha3: Students in Group C will have higher overall aging knowledge than students in Group B.
- 7) Ho4: There will be no difference in overall aging and mental health knowledge between Group B and Group A.
- 8) Ha4: Students in Group B will have higher overall aging and mental health knowledge than students in Group A.
- 9) Ho5: There will be no difference in overall aging and mental health knowledge between Group C and Group A.
- 10) Ha5: Students in Group C will have higher overall aging and mental health knowledge than students in Group A.
- 11) Ho6: There will be no difference in overall aging and mental health knowledge between Group C and Group B.

- 12) Ha6: Students in Group C will have higher overall aging and mental health knowledge than students in Group B.
- 13) Ho7: There will be no difference in aging bias scores between students in Group B and students in Group A.
- 14) Ha7: Students in Group B will have lower aging bias scores than students in Group A.
- 15) Ho8: There will be no difference in aging bias scores between students in Group A and students in Group C.
- 16) Ha8: Students in Group C will have lower aging bias scores than students in Group A.
- 17) Ho9: There will be no difference in aging bias scores between students in Group B and students in Group C.
- 18) Ha9: Students in Group C will have lower aging bias scores than students in Group B.
- 19) Ho10: There will be no difference in overall aging vignette scores between students in Group B and students in Group A.
- 20) Ha10: Students in Group A will have higher overall aging vignette scores than students in Group B.
- 21) Ho11: There will be no difference in overall aging vignette scores between students in Group C and students in Group A.
- 22) Ha11: Students in Group A will have higher overall aging vignette scores than students in Group C.
- 23) Ho12: There will be no difference in overall aging vignette scores between students in Group C and students in Group B.
- 24) Ha12: Students in Group B will have higher overall aging vignette scores than students in Group C.

Significance of the Study

Overcoming misconceptions, such as positive and negative stereotypes about older adults, is essential for graduate counseling students to be effectively trained to work with the aging population. Educational interventions have been found to be the most consistently effective way of increasing aging knowledge and helping individuals to overcome ageist beliefs rooted in faulty aging knowledge (Angiullo, Whit Bourne, & Powers, 1996; Cummings et al., 2006; Olson, 2002; Palmore, 1991; Shenk & Lee, 1995; Stuart-Hamilton & Mahoney, 2003).

For this study, it was hypothesized that a comprehensive educational intervention would increase overall aging knowledge, increase aging and mental health knowledge and lower levels of aging bias and that by adding a structured discussion after the educational intervention overall aging knowledge and overall aging and mental health knowledge would be further increased while levels of aging bias would be further reduced. In addition, it was hypothesized that the group of students who received the educational intervention would be better able to process three aging related vignettes than the group of students who received no educational intervention and that the group of students who received the educational intervention with structured discussion would be better able to process three aging related vignettes than the group of students who only receive the educational intervention.

The results of this study could help rehabilitation educators create curriculum to effectively train future rehabilitation professionals to work with the aging population. Rehabilitation educators could easily use the short-term educational intervention in courses that are specific to aging issues and in courses that are not specific to aging issues. This study may also help rehabilitation counselors by promoting the need for accurate aging-related knowledge in their interaction with older consumers. Lastly, this study may contribute to the existing

literature on educational interventions used in other disciplines by increasing the awareness of ageism in rehabilitation studies.

Definition of Terms

Aging population- Comprised of individuals currently aged 65 and older and individuals who are starting to turn 65 in the year 2011.

Current aging cohort- The population of older individuals comprised of the Silent generation (individuals born between 1925 and 1945) and the G.I. generation, or Greatest generation (individuals born between 1901 and 1924).

Emerging aging cohort- Individuals born between the years 1946 and 1964 that will start turning 65 years of age in the year 2011. This group (also known as the Baby Boom generation) is the largest generational cohort in American history.

Ageism- A process of systematic stereotyping, prejudice, and/or discrimination against a category of people based on their age.

Ageist beliefs- A set of beliefs about how people vary biologically as a result of the ageing process.

Aging knowledge- Factual or correct knowledge about older individuals and/or the aging process.

Aging education- An educational intervention designed to help individuals learn fact based knowledge in order to prevent or undue knowledge about older adults and/or the aging process that is not true.

Assumptions and Limitations of the Study

Because this study used rehabilitation counseling students to test whether or not an educational intervention on aging-related issues could increase aging knowledge, reduce common misconceptions about aging, help create more positive attitudes toward older adults, and increase the desire to work with the aging population, the results of this study are not intended to generalize the aging knowledge, misconceptions, attitudes, or desires of the population of individuals currently working in the field of rehabilitation counseling. Moreover, the sample for this study was taken from already existing groups from three CORE accredited rehabilitation counseling programs. Although the study did not use a random sample, it assumed that the sample population would generalize the population of individuals enrolled in rehabilitation counseling courses at similar institutions. Lastly, although the vignettes used in the study were designed to cover importance aspects of aging related knowledge, they were exploratory in nature and not intended to cover all aspects of aging knowledge competencies.

CHAPTER TWO

REVIEW OF THE LITERATURE

The previous chapter established that the current aging cohort is one of the largest populations underserved by the current mental healthcare system for two major reasons. First, the current cohort's stigma toward mental health care leads many individuals in this group to not seek mental health care services when they need them and to receive mental healthcare from their primary care physicians instead of mental health care workers when they do seek help. Second, because of ageist views, the current mental healthcare system is not effectively organized to deliver and finance the services this population needs. For example, ageist views play a role in mental healthcare professionals' reluctance to enter specialties related to aging, and ageist views affect the quality of care provided by mental healthcare professionals who are currently working with the aging population.

It was also established that the sheer number of individuals in the emerging aging cohort will further strain the mental health care system, and ageism will obstruct the future cohort of aging individuals from receiving proper mental healthcare, but the extent to which ageism will affect the Baby Boomers' access to proper care is not yet known. However, one could infer from the literature that specialties related to aging will be in great demand and future mental health care professionals will more than likely find many job opportunities in the geriatric field.

Understanding various strategies to overcome individual ageism is essential in adequately training counseling students to work with the aging population; therefore, the emphasis of the following sections will be placed on literature that focuses on approaches that are proven to reduce ageist beliefs. Specifically, the following sections review literature that established a need for education to improve aging-related knowledge, literature that established strategies for

overcoming individual ageism, studies that used educational interventions to increase the aging knowledge of both students and professionals in various disciplines, literature that established the advantages of adding structured discussions to didactic lessons, and studies that tested the effectiveness of using structured discussions as a teaching method.

Need for Education to Improve Aging-Related Knowledge

Research found that most people either know very little about aging or have many misconceptions about aging (Bressler, 1996; Coe, Miller, Prendergast, & Grossberg, 1982; Damron-Rodriguez, Villa, Tseng & Lubben, 1997; Gellis, Sherman, & Lawrance, 2003; Kabacoff, Shaw, Putman, & Klein, 1983; Levy & West, 1985; Palmore, 1998; West & Levy, 1984). Research also found that misconceptions about aging led to both negative and positive stereotypes about older adults, which were dehumanizing to aging individuals (Palmore, 1998).

Aging Knowledge among Graduate College Students

According to Palmore (1998), the average individual with a high school or less education had as many misconceptions about aging as they do correct conceptions. Even graduate and professional students, including gerontology students, have been found to have high levels of misconceptions about aging (Palmore, 1998). For example, graduate students missed about one third of the questions when given the Palmore Facts on Aging Quiz (Palmore, 1998). In addition Damron-Rodriguez, Villa, Tseng and Lubben (1997) reported that only 2% of graduate social work students, who were not specializing in gerontology, reported taking any aging related graduate course. In their study, Gellis, Sherman, and Lawrance (2003) found that the first-year graduate social-work students had low levels of knowledge about aging and older adulthood, as well as very negative ideas about older adults. Research has found that once educational levels were controlled, the levels of aging knowledge did not vary significantly between genders, races,

or occupations; moreover, aging knowledge levels did not vary greatly between individuals who had high contact with older adults and individuals who had low contact with older adults (again, when educational levels are controlled) (Bressler, 1996; Coe, Miller, Prendergast, & Grossberg, 1982; Kabacoff, Shaw, Putman, & Klein, 1983; Levy & West, 1985; West & Levy, 1984).

These findings led Palmore (1998) to conclude that neither the public nor college level students (including graduate level students) had been adequately educated about the basic processes of aging and that most individuals needed formal educational experiences specifically designed to teach aging facts in order to gain accurate, fact based knowledge.

Common Misconceptions about Aging among Graduate College Students

Common misconceptions among college graduate students about aging and older adults included both general and specific misconceptions rooted in both negative and positive stereotypes. According to Palmore (1998), general misconceptions rooted in negative stereotypes included beliefs that older individuals were often angry or irritated, that older people tended not to adapt well to change or resist change altogether, that older individuals had more injuries in the home than younger individuals, that older individuals were often bored, that most older individuals lived in long-care institutions, that most older individuals were poor, and that older individuals had higher rates of criminal victimization than younger individuals. Other general misconceptions were rooted in overly positive stereotypes, such as the belief that older people tended to become more religious or spiritual as they age (Palmore, 1998). More specific misconceptions included the belief that most nursing home patients did not have a mental illness, that mental illness was less common among older individuals who were of lower socio-economic status, and that widowhood was more stressful on older women than younger women (Palmore, 1998).

Different Strategies to Overcome Individual Ageism

Largely based on Robert K. Merton's (1949) work of classifying individuals in relation to racism, Palmore (1991) offered a theory on how to best work with different types of individuals in regards to ageism. The first type of individual was described as the "unprejudiced nondiscriminator" (Palmore, 1991, p 142-143). These individuals were "all weather liberals" who accepted the need of all individuals to be treated fairly and their beliefs and actions were congruent (Palmore, 1991, p 142-143). Palmore (1991) warned against these individuals assuming that there was a consensus in the community when there was not. For example, he stated that these individuals might have felt that the community reflected their beliefs because they tended to speak only with other individuals of like mind; these actions could have led these individuals to feel complacent and could have caused them to become inactive. Palmore (1991) further contended that these individuals needed to operate in a leadership role against ageism. The second type of individual was described as being "unprejudiced discriminators" (Palmore, 1991, p 142-143). These individuals were "fair-weather liberals" who, while not prejudiced themselves, continued to support discrimination against older individuals because it was profitable or easier for them to do so (Palmore, 1991, p 143). Palmore (1991) contended that these individuals often went along with discrimination against older individuals in order to avoid stirring up any trouble or to secure promotion at work or other personal advantages, but often these individuals harbored some degree of guilt about doing so and were therefore strategic people with which to work. These individuals reacted well to educational interventions. The third type of individual was described as "prejudiced nondiscriminators" (Palmore, 1991, p 143). These individuals were "fair-weather ageists" who will conform, although often grudgingly, to pressures and/or laws against discrimination toward aging individuals (Palmore, 1991, p 143).

According to Palmore (1991) the best way to change these individuals' ageist beliefs and/or discriminatory actions was through education and making any discriminatory actions costly or unpleasant. Finally, the last type of individual was the "prejudiced discriminator" (Palmore, 1991, p 143). These individuals were "all-weather ageist" and like the "all weather liberal" were consistent in their beliefs and practices (Palmore, 1991, p 143). How best to work with these individuals depended on the situation, but practitioners should try all means necessary in an attempt to get them to move, at the very least, into the third type. Palmore (1991) noted that it was possible for these individuals to be educated or persuaded into type two or even one, but that using other means such as legislation, boycotts, etc., was often needed to bring about non-discriminatory actions.

Studies Using Educational Interventions

Several researchers have studied the effects of different types of educational interventions on the aging knowledge of both students and professionals (Angiullo, Whit Bourne, & Powers, 1996; Cummings, Cassie, Galambos, & Wilson, 2006; Olson, 2002; Shenk & Lee, 1995; Stuart-Hamilton & Mahoney, 2003). These research findings suggested that educational interventions (both short and long in duration) seemed to be an effective way to increase factual aging knowledge.

A study by Cummings, Cassie, Galambos and Wilson (2006) looked at the effects of infusing gerontological specific materials into the curriculum of bachelor of social work (BSW) and first year master's level social work students (MSW). They hypothesized that the treatment group of students (students with the gerontological information infused into their curriculum) would have a greater increase in aging knowledge and a greater decrease in anxiety about aging from pre-test to post-test, when compared to the control group of students (students who did not

have the gerontological information infused into their curriculum). The researchers further hypothesized that the treatment group would show more positive perceptions toward gerontological social work from pre-test to post-test when compared to the control group. Their study took place in a combined social work program at a large, land grant, research university in the southern part of the United States. The researchers developed surveys covering aging knowledge, attitudes toward older adults, and interest in working with older adults and administered the surveys to a total of 165 students the year before the infusion took place (control group) and to 157 students during the implementation year (experimental group) (Cummings et al., 2006). For both groups, the pre-tests were given during the fall semester and the post-tests were given late in the following spring semester. In the end the researchers had a total of 80 control group members and 81 treatment group members that completed both the pre- and post-tests (Cummings et al., 2006). Their findings suggested that infusing social work curriculum with aging specific knowledge was an effective way of increasing aging knowledge. Positive attitudes toward older adults and student willingness to consider working with older adults in a professional capacity also showed significant positive increases from pre-test to post-test when compared to the control group of students who did not receive the infusion of gerontological information into their curriculum (Cummings et al., 2006).

Stuart-Hamilton and Mahoney (2003) examined the effects of an age awareness workshop among 200 participants, who were government employees from the Midlands region of England slated to work with the aging population of their area. The participants were given the Palmore Facts on Aging Quiz (PAQ) and the Fraboni Scale of Ageism (FSA) before having the educational intervention (workshop) and then again one month afterward. The researchers found a significant increase in PAQ scores, indicating an increase in aging knowledge, but did

not find any differences in overall FSA scores, indicating no change in attitudes toward older adults. The researchers theorized that increasing awareness of aging related issues may work to alter factual knowledge, which could lead to some changes of behavior, such as speaking more politically correct about older adults, but that it was not enough to change more deeply ingrained attitudes toward aging.

Olson (2002) wanted to see whether or not a brief, concentrated, educational intervention could increase knowledge of how to assess and effectively work with the aging, while also enhancing positive attitudes toward them and increasing the desire to work with the population in the future. The researcher reasoned that that a brief intervention for social work educators would be more ideal due to the perception that social work curriculum was too full to accommodate larger additions of aging specific content. She measured the effects of her brief educational intervention on a total of 96 MSW and BSW students from a large, public university in the southeastern part of the United States during one semester. The experimental group was given the two and a half hour educational intervention during a regularly scheduled social work class, while the control group of students did not receive the educational intervention. The three dependent variables for the study were knowledge of gerontological social work practice concepts, attitudes toward older adults, and the students' interest in working with older adults. Data for the study was collected through a 50-item questionnaire developed by the researcher. Results of the study showed that knowledge of social work gerontological practice concepts had significantly increased for both the BSW and MSW students when compared to the control group. The attitudes among the study participants toward older adults had increased significantly, though modestly, when compared to the control group. However, the researcher

did not find any significant changes in the experimental groups desire to work professionally with older adults when compared to the control group (Olson, 2002).

Ragan and Bowen (2001) looked at how negative attitudes about aging could be altered through providing correct aging information via video presentations. Furthermore, the research examined how positive reinforcement for using correct aging information could further support the change in ageist attitudes. The study used a sample of college students; the sample was divided into three groups. The first group received the Aging Semantic Differential (ASD) then was introduced to correct aging information through a video presentation. The second group received the ASD, watched the video on correct aging information, and took part in two discussions of the video tape (one immediately following the video and one conducted one week later). During both discussions, the discussion leader of the second group provided verbal reinforcement to all students who provided correct aging information during the discussion. The third group received the ASD, watched the video on correct aging information, and took part in two discussions (one immediately following the video and one conducted one week later), but the discussions were not focused on the information in the video, and the discussion leader did not use verbal reinforcements when the students provided correct aging information. All groups were given two post-tests: the ASD was given right after the video and again four weeks after the initial pre-test. In all groups, the attitudes toward aging individuals improved between the pre-test and first post-test and, none of the groups' scores improved between the first post-test and the second post-test. However, the second group, which received the positive reinforcement during the discussion questions was the only group in which the second post-test scores remained the same; the other two groups scored lower on the second post-test than they did on the first post-test (Ragan & Bowen, 2001).

Researchers have also studied the effects of both educational interventions and hands on contact with older adults. Angiullo, Whitbourne and Powers (1996) studied the effects of an educational intervention given to undergraduate psychology students, as well as the effects of weekly volunteering with older adults to see whether or not they led to attitude changes toward older adults among the students. They found that the student's knowledge about older adults increased and their attitude improved over the semester, but that the subgroup of students who took part in the weekly volunteer work with older adults showed no significant difference from the group who did not.

Lastly, Shenk and Lee (1995) created a professional development program in gerontology for professionals already providing services to older adults. They felt that they were able to successfully accomplish their major objectives of expanding the participants' knowledge of gerontological theories, issues, and practices, as evidenced by significant differences found between pre and post-test scores on the Palmore Facts on Aging Quiz. In addition, they felt that the intervention expanded the participants' understanding of their own behaviors and communication styles when working with the aging population and helped the participants develop support from professional colleagues, as evidenced by positive participant feedback about their experiences taking part in the study.

Numerous studies have shown that educational interventions, of both short and long duration, could have positive effects on aging knowledge. Students, in particular, seemed to benefit from brief, targeted educational interventions (where aging knowledge is given all at once during a single class) as much as semester-long or program-long educational interventions (where aging specific information is infused into the existing curriculum) (Cummings et al., 2006; Olson, 2002). Short-term educational programs for professionals have also proven to be

an effective way of conveying aging specific knowledge (Shenk & Lee, 1995; Stuart-Hamilton & Mahoney, 2003). With only a few researchers finding modest changes and others finding none, whether or not educational interventions could effectively change attitudes toward older adults was not clear from the research (Olson, 2002; Stuart-Hamilton & Mahoney, 2003). Frequent interactions with older adults did not appear to be an effective way to increase aging knowledge (Olson, 2002).

Advantages of Adding Structured Discussions to Didactic Lessons

According to Brookfield and Preskill (2005), there were numerous advantages to adding structured discussions to didactic lessons. The first advantage was that structured discussion helped students explore a diversity of perspectives, including those views that may challenge their own. The second advantage to including a structured discussion to regular didactic lectures was that it increased the students' awareness of and tolerance for the complexity and oftentimes ambiguity of some topics, leading them to ask even more questions about a topic after the completion of the lesson as well as helping students to recognize and investigate their own preconceived notions of a topic. A more practical advantage to having structured discussions, as opposed to completely open ended discussions, was that structured discussions encouraged the students to be attentive and respectful listeners, which Brookfield and Preskill (2005) contended was just as important as speaking up during the discussion. Other advantages to including structured discussions to a didactic lesson included the following benefits: they helped students understand that continuing disagreement was acceptable; they increased the students' intellectual agility; they helped students become more connected to the topic being discussed; they helped students learn the processes and habits of democratic discourse; they affirmed students as co-creators of knowledge and developed habits of collaborative learning; and they increased a

student's ability to be more empathetic to views and feelings of others while developing the skills of synthesizing and integrating what they had learned (Brookfield & Preskill, 2005; Welty, 1989).

Studies Testing the Effectiveness of Structured Discussions

A study by Johnson and Mighten (2005) compared two groups of nursing students; the first group (the control group) ($N= 88$) received information in a traditional, didactic lecture format, while the second group (the experimental group) ($N= 81$) received word processed lecture notes combined with structured group discussion. The measures used for the study were examination scores in a three credit hour course in medical-surgical nursing (Johnson & Mighten, 2005). The findings indicated a statistically significant difference between the mean examination scores of the two groups of nursing students, with the students who received the structured discussion having the higher overall mean scores (Johnson & Mighten, 2005).

Hake (1998) completed extensive research in regards to how best to teach introductory physics courses to students at all levels: high school, undergraduate, and graduate. Through his research, he became a strong advocate for what he called IE or interactive education, which established classroom discussions (between students/instructors and student/students) as the most crucial aspect of learning (Hake, 1998). His findings, which included students in 62 introductory physics classes ($N=6542$) from a diverse population of high school, college, and university classes, found that, when compared to courses that used traditional methods of teaching (14 classes) ($N= 2084$), the courses that used IE methods (48 classes) ($N=4458$) showed pre-post-test gains on the Halloun-Hestenes Mechanics Diagnostic test and the Force Concept Inventory (both commonly used measures of physics knowledge) (Hake, 1998). The scores of the classes that

used IE methods were two standard deviations above the scores of the classes that used traditional teaching methods that primarily focused on didactic lectures (Hake, 1998).

Bierzychudek and Reiness (1992) wanted to explore important biological ideas in as much depth as possible over a one semester course. The course was set up in a purposely unusual format with two of the three weekly one hour class periods devoted to lectures only and one of the weekly class periods devoted to lecture and class discussion of the required reading material; for the one class period devoted to lecture and discussion, the instructors divided the 30-person class in half, and each instructor led one of the discussion sessions (Bierzychudek & Reiness, 1992). Students were asked to come to the discussion class periods with their own questions, which then served as the starting point for the discussions (Bierzychudek & Reiness, 1992). According to the study's authors, the structured discussion format offered two major advantages over a course consisting solely of lectures: first, it enabled them (the instructors) the ability to better access and monitor the students' understanding of the course material; secondly, it allowed the students the opportunity to delve deeper into the topic of their interest (Bierzychudek & Reiness, 1992). As might be expected, the researcher's primary way of evaluating the success of the course was through student evaluations. In that regard, they received some very encouraging feedback, such as "I have already recommended this class to other students"; "I had a good time and learned a lot," and "It [the class] has made me feel that I am not scientifically illiterate" (Bierzychudek & Reiness, 1992, p. 322). In addition, the researchers were persuaded that the discussion sections were "especially valuable," which led them to conclude that the students "understood the material much better after a discussion" (Bierzychudek & Reiness, 1992, p. 322).

Haffer and Raingruber (1998) used several approaches, including structured discussions, to try and help a group of baccalaureate nursing students improve their clinical reasoning and thinking skills. Participants of the study consisted of 15 students who were deemed to have had significant problems grasping the concept of “independent clinical reasoning,” or the ability to process complex and dynamic information contextually and quickly (Haffer & Raingruber, 1998, p. 62). The researchers used group discussion to enhance the students’ abilities to process clinical narratives, which were used to assess their understanding of the decision making process and the correct nursing procedures for various clinical situations (Haffer & Raingruber, 1998). The results of the study showed that the decision making skills and aptitude for choosing the correct nursing procedures improved in all 15 students; furthermore, the students’ descriptions of themselves changed from being “significantly colored by self-doubts” and feeling overwhelmed to having more self confidence in their own abilities, which they attributed largely to the fact that they drew strength from other’s experiences and learned that asking questions was acceptable, even if those questioned were in a position of power, such as their instructor or supervisor (Haffer & Raingruber, 1998).

Finally, Ruhl, Hughes and Schloss (1987) wanted to see the effects of using multiple, short-term discussions during the course of otherwise normal lectures (three two-minute discussions during a 45 minute lecture). Participants of the study were students majoring in special education and taking part in a course on educating the learning disabled (n=40) and/or an introductory course on educating the emotionally disturbed (n=32) (Ruhl, Hughes & Schloss, 1987). Five lectures were given at different times between the two courses, which were both offered in the fall and spring semesters, and students had to have attended all five lectures to be included in the study. The subjects of the study were not told that they were in the study. The

control group for study did not receive the three two-minute discussion breaks, while the experimental group did. The independent variable (IV) for the study was the three two minute discussions; the dependent variables were “free-recall” scores administered after each of the five lectures and a 65-item multiple-choice test, covering the total content of the five lectures, administered 12 days after the last lecture (Ruhl et al., 1987). The researchers used a 2X2, randomized, factorial analysis of variance to test the dependent measures, and results of the study showed that the experimental group scored significantly higher in regards to both the “free recall” scores and the multiple-choice test (Ruhl et al., 1987).

CHAPTER THREE

METHODOLOGY

Participants

The population for this study consisted of students enrolled in graduate rehabilitation counseling classes at Arkansas State University in Jonesboro, Arkansas, Alabama State University in Montgomery, Alabama and Southern Illinois University in Carbondale, Illinois. All three programs currently prepare their students for careers in counseling practices that are diverse in scope and may include work with older adults. All three programs are accredited by the Council on Rehabilitation Education (CORE). Random selection of students was not feasible for this study. However, students were placed in one of the following already existing groups: the control group (Group A) consisted of an already existing group of students enrolled in a graduate rehabilitation counseling class at Arkansas State University; the experimental group 1 (Group B) consisted of an already existing group of students enrolled in a graduate rehabilitation counseling class at Southern Illinois University at Carbondale, and the experimental group 2 (Group C) consisted of a combination of two already existing groups of students taken from two graduate rehabilitation counseling classes at Alabama State University. Demographic sheets were filled out by all three groups at the time of testing. All participants who completed the research were then eligible for a drawing to win a \$50.00 Wal-Mart gift card.

Sex and Ethnicity of Participants

The sample for this study consisted of 40 graduate students enrolled in rehabilitation counseling courses at three different universities: Arkansas State University, Alabama State University and Southern Illinois University at Carbondale. There were three additional participants who neglected to complete all required information. It was not feasible for me to

have them complete their data due to the fact that they were from other institutions and the spring semester had ended (making it difficult to locate them). The vast majority of the students in the study were female ($n=32$). There were seven different ethnicities represented in the sample: Asian/Pacific Islander, Asian/Indian, Latino/Hispanic, Black/African American, Caucasian/White, other (Kenyan), and more than one race (African American and Native American). Table 1 describes the students' sex and ethnicity for each group:

Table 1

Demographics: Sex and Ethnicity

		Group A	Group B	Group C	Total
<u>Sex</u>	Male	4	2	2	8
	Female	14	8	10	32
	Total	18	10	12	40
<u>Ethnicity</u>	Asian/Pacific Islander	0	0	1	1
	Asian/Indian	0	0	1	1
	Latino/Hispanic	1	0	0	1
	Black/African	9	10	2	21
	Caucasian/White	7	0	7	14
	Native American	0	0	0	0
	Other	0	0	1	1
	More than 1 Race	1	0	0	1

Age of Participants

There was a wide variance in the ages of the students who took part in the study with the youngest participants being 22 and the oldest participant being 52. The overall mean age for the study was 30 years of age. Group B was the youngest group with a mean age of 25, compared to

31 years of age for Group A and 33 years of age for Group C. Table 2 shows the ages for all participants in all three groups:

Table 2

Demographics: Age

	Group A	Group B	Group C
Participant	23	22	22
Age	23	23	23
	24	23	24
	25	24	25
	26	24	26
	26	25	30
	28	25	34
	28	25	35
	29	26	40
	30	34	40
	30		45
	32		46
	33		
	36		
	37		
	40		
	41		
	52		
Total	$N = 18$	$N = 10$	$N = 12$
Age/Range	Range= 23 to 52	Range= 22 to 34	Range= 22 to 46
Mean	Mean= 31	Mean= 25	Mean= 33

Graduate Major of Participants

Almost all study participants chose rehabilitation counseling ($n=39$) as their graduate major, while one participant chose counseling psychology ($n=1$) as their graduate major. Table 3 shows the graduate majors for all three groups.

Table 3

Graduate Major

	<u>Rehabilitation Counseling</u>	<u>Counseling Psychology</u>
Group A	18	0
Group B	10	0
Group C	12	1
Total	39	1

Educational Background of Participants in Regards to Aging-Related Knowledge

The majority of individuals in the control group (Group A) and the first experimental group (Group B) reported that they had had a college level course specifically about aging related issues ($n= 14$, $n= 7$), while half of the second experimental (Group C) also reported having had a college level course specifically about aging related issues ($n= 6$). In addition, the majority of all three groups reported that time had been taken to discuss aging related issues in a college level course not solely devoted to aging related issues ($n= 10$, $n= 8$, $n= 8$). Table 4 describes the educational background of all three groups:

Table 4

Education

<u>Had College Course</u>		
	<u>Yes</u>	<u>No</u>
Group A	14	4
Group B	7	3
Group C	6	6
Total	27	13
<u>Had Time in College Course</u>		
	<u>Yes</u>	<u>No</u>
Group A	10	8
Group B	8	2
Group C	8	4
Total	26	14

Professional Experience of Participants in Regards to Aging Population

The majority of individuals in the control group (Group A) and the first experimental group (Group B) reported that they had worked in a professional capacity with older adults ($n=12$, $n=8$), while half of the second experimental (Group C) also reported having worked with older adults in a professional capacity ($n=6$). However, less than half of individuals in the control group (Group A) reported that they had had professional training specifically designed to help them work with older adults ($n=6$). A little over half of the individuals in the first experimental group (Group B) reported having had professional training specifically designed to help them work with older adults, while only three in the experimental group (Group C) reported having had such professional training ($n=6$, $n=3$). Table 5 describes the professional experiences of all three groups:

Table 5

Professional Experience

	Had Professional Work	
	<u>Yes</u>	<u>No</u>
Group A	12	6
Group B	8	2
Group C	6	6
Total	26	14

	Had Professional Training	
	<u>Yes</u>	<u>No</u>
Group A	6	12
Group B	6	4
Group C	3	9
Total	15	25

Level of Self Competence Reported by Participants

Group A and Group C reported low levels of self competence in regards to rating their ability to work with older adults in a professional capacity ($n=6$, $n=3$), while over half the individuals in Group B felt that they were competent to do such work ($n=6$). Table 6 shows

how many individuals in each group answered yes or no to the question of whether or not they felt competent to work with older adults:

Table 6

Self-Competence

	Felt Self-Competent	
	<u>Yes</u>	<u>No</u>
Group A	6	12
Group B	6	4
Group C	3	9
Total	15	25

Instruments

Palmore Facts on Aging Quiz 1, Multiple-Choice Format (FAQ1) (See Appendix A)

Developed in 1976 for the purpose of stimulating class discussion, the Palmore Facts on Aging quiz (FAQ1) has been administered to health care professionals, teachers, and students (Cowan, Fitzpatrick, Roberts, & While, 2004). Since its development the FAQ1 has been widely used as an assessment of different levels of aging knowledge, measuring a person's bias toward older adults, as well as a measurement for the effectiveness of educational interventions (Cowan et al., 2004). In fact, the FAQ1 has been found by researchers to be both valid and reliable when used to stimulate group discussions, to clarify misconceptions about older adults and the aging process, to measure different levels of information about aging, and to measure the effects of an educational intervention (Cowan et al., 2004). Palmore (1998) suggests that researchers use the multiple-choice format rather than the true/false format so as to reduce the effects of guessing the correct answers. It is also suggested that researchers add a "don't know" response, which allows for a distinction to be made between misconceptions and lack of knowledge (Palmore, 1998). According to Palmore (1998) the percentage of correct answers on the FAQ1 measures a

person's overall aging knowledge, the percentage of incorrect answers measures the amount of misconception a person has, and the percentage of "don't know" responses measures a lack of knowledge.

Reliability and validity of the FAQ1. According to Palmore (1998) the greatest evidence for the validity of the FAQ1 is the statistics and studies documenting the correct answers for each item, many coming from representative national studies (Atchley, 1996; Blazer & George, 1995; Butler, 1995; Bulter & Lewis, 1982; George, 1995; Gurland, 1995; Lakin, 1995; Lopta, 1995; Mace & Rabins, 1991; Mitty, 1995; Myer et al., 1984; Reisberg, 1995; Woodruff-Pak, 1995). In addition, Palmore (1998) argues that the local studies used in developing the FAQ1 are generally agreed upon by experts in gerontology and have a high level of face validity. Also supporting the validity of the FAQ1 is the fact that individuals with training in gerontology tend to score higher on the quiz. In regards to the reliability of the FAQ1, comparable groups (such as individuals with similar educational attainment) tend to have similar scores and the rank ordering of the percentage of items wrong tend to be high (Palmore, 1998). The highest internal consistency for the FAQ1 was reported by Pennington, Pachana and Coyle (2001), who used the true/false version of the quiz with the addition of a "don't know" option on 109 first and third year students, showing an alpha level of .83. A much more modest internal consistency of 0.61 was cited by Cowan, Fitzpatrick, Roberts and While (2004) when items of the quiz were evaluated according to incorrect or correct responses. A test-retest reliability correlation of .68 was reported by Harris, Changas and Palmore (1996) for the FAQ1.

Palmore Facts on Aging and Mental Health Quiz (FAMHQ) (See Appendix B)

Palmore (1998) reported that he developed the FAMHQ due to the devastating effects of mental illness among the aging population, the growing concern over the cost of mental health

treatment for older adults, and the need to intensify efforts to work toward preventions and cures. He felt that the quiz would especially be helpful for individuals who want to work with or help older adults with such conditions. The FAMHQ is comparable in all ways (design and use) to the FAQ1, except that it focuses on mental health specific knowledge, whereas the FAQ1 covers overall aging knowledge.

Reliability and validity of the FAMHQ. Hinrichsen and McMeniman (2002) used the FAMHQ when assessing the impact of geropsychology training with 90 psychology interns and externs. They felt comfortable in using the test due to its similarities to the FAQ1 and FAQ2, which have high face validity and whose correct responses are all supported by solid research findings. They make no mention of Cronbach Alpha scores or test-retest reliability correlations even though they retested the group they researched nine months later.

Aging Vignettes (see Appendix E)

I developed three vignettes for the research participants to read and process in order to discern their ability to use factual aging knowledge as opposed to information based on misconceptions and/or stereotypes. These vignettes were designed to be exploratory in nature and are not to be seen as an essential feature of the research. The research participant needed to be able to successfully use factual knowledge to receive a score of two. If they were able to use some factual knowledge while processing the vignette, they received a score of one, and if they were unable to use any factual knowledge, they received a score of zero. A total score was then computed for all three vignettes with the lowest possible score being zero and the highest possible score being six.

Variables

The independent variables (IVs) for this study were an educational intervention

(approximately one and a half hours in duration) designed to educate graduate counseling students about aging knowledge and a 15-20 minute, structured discussion following the educational intervention. There were four dependent measures: total percentage correct on the Palmore Facts on Aging Quiz 1 (FAQ-1), total percentage correct on the Palmore Facts on Aging and Mental Health Quiz (FAMHQ), negative bias score from the FAQ-1, and the students' ability to read and process aging related vignettes, giving answers based on factual knowledge about aging rather than answers based on misconceptions or stereotypes. Demographic variables and self-competency were also considered. These variables included sex, age, ethnicity, graduate major, any previous work done with older individuals in a professional capacity, any previous college level courses in gerontology, any time spent in other college level courses on issues related to older adults, any professional training experiences (outside of college) in regards to aging issues, and whether or not the individuals felt that they are more competent than most people to work with older adults.

Procedure

This study utilized a one-time, short-term educational intervention that I designed (see Appendix D) entitled The Truth About Aging. It was designed to provide a thorough overview of the following: aging demographics, specifics about the current aging cohort and the emerging or future aging cohort, ageism and the effects of ageism, cognitive functioning in older adulthood, the physical aspects of aging, older adulthood and sex, emotional aspects of older adulthood, social aspects of older adulthood, older adults dealing with change in their lives, older adulthood and work, older adults and religion, aging and mental health, depression in older adulthood, suicide in older adulthood, sleeping patterns in older adulthood, anxiety disorders, schizophrenia, dementia, organic brain impairment in older adulthood, paranoid disorders,

Alzheimer's disease, as well as information on how to work with the aging population in a professional counseling capacity. In addition, one of the groups (Group C) was given structured discussion time after the educational intervention that lasted around twenty minutes.

The first experimental group (Group B) received the educational intervention lasting approximately one and a half hours in duration and approximately three weeks later completed the Palmore Facts on Aging Quiz version one (FAQ1) in multiple choice format (see Appendix A), the Palmore Facts on Aging and Mental Health (FAMHQ) in multiple choice format (see Appendix B), as well as three aging related vignettes developed by the researcher (see Appendix E). The second experimental group (Group C) received an educational intervention lasting approximately one and a half hours in duration followed by a researcher-led discussion period lasting approximately twenty minutes in duration, and approximately three weeks after the intervention and discussion, Group C completed the Palmore Facts on Aging Quiz version one in multiple choice format, the Palmore Facts on Aging and Mental Health in multiple choice format, as well as three aging related vignettes developed by the researcher approximately three weeks later. The control group (Group A) received the same measures without having any previous intervention. All study participants were informed that their participation in the study was voluntary and that they were free to drop out at any time.

Data Analysis

Students in the control group (Group A) were given the FAQ-1, FAMHQ, and vignettes without having either the educational intervention or the structured discussion. Students in the first experimental group (Group B) were given the FAQ-1, FAMHQ, and vignettes approximately three weeks after they had been given the educational intervention. Students in the second experimental group (Group C) were given the FAQ-1, FAMHQ, and vignettes

approximately three weeks after they had been given the educational intervention and structured discussion.

An analysis of variance (ANOVA) was the most appropriate test for this analysis because comparisons were made between three independent groups (Groups A, B, C). According to Tabachnick and Fidell (2007), ANOVA is the best technique to use when testing the hypothesis where there are differences in means among several groups that are derived from the same population. According to Tabachnick and Fidell (2007), assumptions of ANOVA include the use of random sampling from populations that are independent of one another, having data that is normally distributed and is homogeneous, and having equal population standard deviations. Moreover, if the between-groups estimate is significantly larger than the within-groups estimate, it is unlikely that the population means were equal or that the assumptions of ANOVA were violated (Tabachnick & Fidell, 2007).

Even though the participants for this study were from different institutions of higher education, with the exception of Group B being composed of two classes from Alabama State University, they were still all taken from the same population (graduate counseling students). While it was not feasible to meet the assumption of having a truly random sample, I felt comfortable using the already formed groups of students because they were the only population of students that I personally had access to. The fact that problems created by unequal group sizes are “relatively minor” when using ANOVA was another advantage of using an ANOVA, or more specifically, a one-way, between-subjects ANOVA for this study (Tabachnick & Fidell, 2007, p. 46).

I chose running an ANOVA results in a p-value. When a p-value indicated a statistically significant difference between the three groups a Tukey post-hoc analysis was done and the

resulting p-values and mean difference scores were used to test the null hypothesis (H_0) for each dependent variable. While I could have used a Priori Comparison, I chose to move forward with the Tukey post-hoc comparisons because in his book, *Fundamental Statistics for the Behavioral Sciences* (7th Edition), David C. Howell expresses concerns about the familywise error rate that is usually ignored because of the limited number of planned contrast. Alpha was set at .05. When the p-value was less than alpha it indicated that H_0 was unlikely to be true, which then suggested that a significant difference existed between the groups. Since the hypotheses in this study were directional in nature (that a mean score in one group was higher or lower than another group) the mean difference score was used to see if a mean was higher or lower than the mean of another group.

CHAPTER FOUR

RESULTS

Statistical Analysis

Results of a one-way ANOVA showed that there was a statistically significant difference in means among the three groups in regards to overall aging knowledge as measured by the Palmore Facts on Aging Quiz I, ($F(2, 37) = 4.137, p = 0.024, p < 0.05$), and on negative aging bias scores as measured by the Palmore Facts on Aging Quiz I, ($F(2, 37) = 4.198, p = 0.023, p < 0.05$). Results of the one-way ANOVA did not show a statistically significant difference in the means among the three groups in regards to aging and mental health knowledge, ($F(2, 37) = 2.348, p = 0.110, p > 0.05$), or in total vignette scores, ($F(2, 37) = 1.034, p = 0.365, p > 0.05$). Because the between-group mean square estimates were significantly larger than the within-groups estimate, it is unlikely that the assumptions of ANOVA had been violated. Table 7 shows the results of the one-way ANOVA.

Table 7

ANOVA Results

Measure	Sum of Squares	df	Mean Square	F	Sig.
FAQ1					
Between Groups	0.248	2	0.124	4.137	0.024
Within Groups	1.109	37	0.030		
Total	1.356	39			
FAQ1 Negative Bias					
Between Groups	0.269	2	0.134	4.198	0.023
Within Groups	1.185	37	0.032		
Total	1.454	39			
FAMHQ					
Between Groups	0.142	2	0.071	2.348	0.110
Within Groups	1.116	37	0.030		
Total	1.257	39			
Total Vignette					
Between Groups	5.989	2	2.994	1.034	0.365
Within Groups	107.111	37	2.895		
Total	113.100	39			

Since the results of the one-way ANOVA showed statistically significant differences in means among the three groups in regards to overall aging knowledge scores and negative aging bias scores, a poc-hoc analysis, Tukey HSD, was run to look for a difference between the mean of each group in order to answer the research questions posed for this study by testing the difference in overall aging knowledge, the difference in aging and mental health knowledge, the difference in negative aging bias, and the difference in the total vignette scores.

Difference in Overall Aging Knowledge: FAQ1 Tukey HSD

The first three research questions looked at whether or not students who received the educational interventions would have higher overall aging knowledge than the students who did not receive the educational interventions.

Research Question 1. The first research question in this study was: Will the students who receive only the educational intervention (Group B) have higher overall aging knowledge

than the students who do not receive any interventions (Group A)? The hypothesis was that the group who received the educational intervention (Group B) would have higher overall aging knowledge than the students who did not receive any intervention (Group A). A Tukey HSD post-hoc analysis was used to test the null hypothesis, H_01 : there will be no difference in overall aging knowledge between Group B and Group A. Contrary to previous research findings (Shenk, & Lee, 1995; Stuart-Hamilton, & Mahoney, 2003) into the effects of short-term educational interventions as the sole factor in improving the overall aging knowledge of individuals, no significant results were found between the groups in this study ($p = 0.310$, $p > 0.05$); therefore, H_01 could not be rejected.

Research Question 2. The second research question in this study was: Will the students who receive the educational intervention with discussion (Group C) have higher overall aging knowledge than the students who do not receive any interventions (Group A)? It was hypothesized that the group who received the educational intervention with structured discussion (Group C) would have higher overall aging knowledge than the students who did not receive any intervention (Group A). A one-way ANOVA followed by a Tukey HSD post-hoc analysis was used to test the null hypothesis, H_02 : there will be no difference in overall aging knowledge between Group C and Group A. Results revealed that there was a significant difference between the mean of the group of students who received the educational intervention with structured discussion (Group C) and the mean of the group of students who received no intervention (Group A) ($p = 0.019$, $p < 0.05$) and that Group C's scores were in fact higher than Group A's as indicated by a mean difference of (0.1833) which meant that H_02 could be rejected.

Research Question 3. The third research question in this study was: Will the students who receive the educational intervention with discussion (Group C) have higher overall aging

knowledge than the students who receive only the educational intervention (Group B)? It was hypothesized that the group who received the educational intervention with structured discussion (Group C) would have higher overall aging knowledge than the group who received only the educational intervention (Group B). The results of the study showed no statistically significant difference in the two groups' means ($p = 0.516$, $p > 0.05$); therefore the null hypothesis, Ho3: there will be no difference in overall aging knowledge between Group C and Group B could not be rejected. Table 8 shows the results of the Tukey HSD post-hoc analysis in regards to students' overall aging knowledge:

Table 8

Difference in Overall Aging Knowledge: FAQI Tukey HSD

(I) Group	(J) Group	Sig.	Mean Difference
Group C	Group A	0.019	0.18333
	Group B	0.516	0.08200

Difference in Aging and Mental Health Knowledge: FAMHQ Tukey HSD

The second group of three research questions looked at whether or not students who received the educational interventions would have higher aging and mental health knowledge than the students who did not receive the educational interventions.

Research Question 4. The fourth research question in this study was: Will the students who receive only the educational intervention (Group B) have higher overall aging and mental health knowledge than the students who do not receive any interventions (Group A)? The hypothesis was that the group who received the educational intervention (Group B) would have higher overall aging and mental health knowledge when compared with the group who did not receive any intervention. Despite previous research by Hinrichsen and McMeniman (2002) showing that using an educational intervention was an effective way to increase aging and

mental health knowledge, it was found that there were no significant differences between the mean of the group that received the educational intervention (Group B) and the mean of the group that did not receive any interventions (Group A) ($p = 0.622$, $p > 0.05$). Hence, the null hypothesis, Ho 4: there will be no difference in overall aging and mental health knowledge between Group B and Group A, was rejected.

Research Question 5. The fifth research question in this study was: Will the students who receive the educational intervention with discussion (Group C) have higher overall aging and mental health knowledge than the students who do not receive any interventions (Group A)? The hypothesis was that the students who received the educational intervention with structured discussion (Group C) would have higher aging and mental health knowledge than the students who did not receive any intervention (Group A). It was found that the group of students who received the educational intervention with structured discussion (Group C) did not have statistically different mean scores from the group of students who did not have any intervention (Group A). The null hypothesis, Ho5: there will be no difference in overall aging and mental health knowledge between Group C and Group A could not be rejected at the 0.05 level of confidence, ($p = 0.091$, $p > 0.05$).

Research Question 6. The sixth research question in this study was: Will the students who receive the educational intervention with discussion (Group C) have higher overall aging and mental health knowledge than the students who receive only the educational intervention (Group B)? The hypothesis was that the students who received the educational intervention with structured discussion (Group C) would have higher overall aging and mental health knowledge than the students who received the educational intervention only (Group B). However, my research found that there were no significant differences in the means for aging and mental

health knowledge between the group of students who received the educational intervention with structured dissection and the group of students who only received the educational intervention.

The null hypothesis, Ho6: there will be no difference in overall aging and mental health knowledge between Group C and Group B could not be rejected. Table 9 describes the statistical results for aging and mental health knowledge:

Table 9

Difference in Aging and Mental Health Knowledge: FAMHQ Tukey HSD

(I) Group	(J) Group	Sig.	Mean Difference
Group C	Group A	0.091	0.14000
	Group B	0.568	0.07600

Difference in Negative Aging Bias: FAQ1 Negative Bias Tukey HSD

The third group of three research questions looked at whether or not students who received the educational interventions would have lower levels of negative aging bias than the students who did not receive the educational interventions.

Research Question 7. The seventh research question was designed to examine the impact of the educational intervention on the negative aging bias of the students. Negative aging bias was measured using the Palmore Facts on Aging Quiz I, multiple choice format, specifically by dividing the number answered that represented negative aging bias by the total number of possible negative aging bias answers ($n=18$). The hypothesis was that the group of students who had received the educational intervention (Group B) would have lower negative aging bias scores than the group of students who did not receive any intervention (Group A). A Tukey HSD was used to test the null hypothesis, Ho7: There will be no difference in aging bias scores between students in Group B and students in Group A. The test results revealed that there was no statistically significant difference between the groups means in negative aging bias scores for

the group of students who received the educational intervention (Group B) and the group of students who did not (Group A), ($p = 0.999, p > 0.05$).

Research Question 8. The eighth research question in this study was: Will the students who receive the educational intervention with discussion (Group C) have lower levels of aging bias than the students who do not receive any interventions (Group A)? The hypothesis was that the group of students who had received the educational intervention with structured discussion (Group C) would have lower levels of negative aging bias than the students who did not receive any intervention (Group A). It was found that there was, in fact, a statistical difference between the mean of the group of students who received the educational intervention with structured discussion (Group C) and the mean of the group of students who did not receive any intervention (Group A), ($p = 0.028, p < 0.05$) and that the negative aging bias scores of Group C was lower than the negative aging bias scores of Group A as indicated by a negative mean difference of (- 0.17972). The null hypothesis H_{08} : there will be no difference in aging bias scores between students in Group A and students in Group C could be rejected.

Research Question 9. The ninth research question in this study was: Will the students who receive the educational intervention with discussion (Group C) have lower levels of aging bias than the students who receive only the educational intervention (Group B)? It was hypothesized that the group of students who received the educational intervention with structured discussion (Group C) would have lower levels of aging bias levels than the group of students who received only the educational intervention (Group B). It was found that there was not a statistically significant difference between the mean of the group of students who received the educational intervention (Group B) and the mean of the group of students who received the educational intervention with structured discussion at the 0.05 level ($p = 0.066, p > 0.05$) The null

hypothesis Ho9: there will be no difference in aging bias scores between students in Group B and students in Group C could not be rejected. Table 10 shows the results of negative aging bias scores:

Table 10

Difference in Negative Aging Bias: FAQ1 Negative Bias Tukey HSD

(I) Group	(J) Group	Sig.	Mean Difference
Group C	Group A	0.028	-0.17972
	Group B	0.066	-0.17750

Difference in Total Vignette Score Tukey HSD

Finally, the last three research questions looked at whether or not students who received the educational interventions were better able to read and process the three exploratory aging related vignettes using factually based knowledge. I scored each exploratory vignette with a score of zero (indicating that they were unable to use factual knowledge while processing the vignette), a score of one (indicating that they used both factual and nonfactual information while processing the vignette), and a score of two (indicating that they were able to use factual knowledge when processing the vignette). Each research participant's individual vignette scores were then added together for a total score, with a low score of 0 indicating that no factual knowledge was used and a high score of 6 indicating that only factual knowledge was used (see Appendix F). The means of the total scores among the groups were then compared to answer the following research questions.

Research Question 10. The tenth research question in this study was: Will the students who receive the educational intervention (Group B) have higher overall vignette scores than the students who do not receive any intervention (Group A)? It was hypothesized that the students who received the educational intervention (Group B) would have higher overall aging vignette

scores than the students who received no intervention (Group A). A Tukey HSD was used to test the null hypothesis, H_{010} , there will be no difference in overall aging vignette scores between students in Group B and students in Group A. Test results indicated that there was no significant difference between the means of the two groups in overall vignette scores ($p = 0.688, p > 0.05$).

Research Question 11. The eleventh research question in the this study was: Will the students who receive the educational intervention with structured discussion (Group C) have higher overall vignette scores than the students who do not receive any intervention (Group A)? It was hypothesized that the students who received the educational intervention with structured discussion (Group C) would have higher overall aging vignette scores than the students who received no intervention (Group A). However, it was found that there was no difference in the two groups' means in regards to overall aging vignette scores ($p = 0.350, p > 0.05$). The null hypothesis, H_{011} , there will be no difference in overall aging vignette scores between students in Group C and students in Group A could not be rejected.

Research Question 12. The twelfth and final research question in this study was: Will the students who receive the educational intervention with structured discussion (Group C) have higher overall vignette scores than the students who receive only the educational intervention (Group B)? It was hypothesized that the group of students who received the educational intervention with structured discussion (Group C) would have higher overall vignette scores than the group of students who had only the educational intervention (Group B). However, it was found that there was no significant difference between the mean group of students who received only the educational intervention (Group B) and the mean of the group of students who received the educational intervention with structured discussion (Group C) ($p = 0.891, p > 0.05$). The null hypothesis, H_{012} , there will be no difference in overall aging vignette scores between students in

Group C and students in Group could not be rejected. Table 11 shows the results of the overall vignette scores.

Table 11

Difference in Total Vignette Score Tukey HSD

(I) Group	(J) Group	Sig.	Mean Difference
Group C	Group A	0.350	0.88889
	Group B	0.891	0.33333

CHAPTER FIVE

DISCUSSION

The primary purpose of this study was to test the effects of an educational intervention on the overall aging knowledge of graduate counseling students. The secondary purpose of this study was to test the effects of an educational intervention on overall aging and mental health knowledge, negative aging bias and the ability to use factually based knowledge to process exploratory vignettes about situations faced by aging adults. This chapter summarizes the challenges, methodology and limitations of the study and discusses the conclusions and recommendations for future research based on the findings of the study.

Summary of the Research Challenge

Preparing the next generation of counseling professionals represents a significant challenge to rehabilitation educators. The sheer number of the emerging cohort of older adults, known as the Baby Boomer generation, will help push the overall population of individuals aged 65 and older to an incredible 72 million people (constituting 20 percent of the total U.S. population) by the year 2030 (Federal Interagency Forum on Aging-Related Statistics, 2008). This reality will call for a dramatic increase in the need for rehabilitation professionals of all educational backgrounds, including those trained to work with mental health related disabilities, substance use disorders, physically disabling conditions, and those disabilities that co-occur, or present in ways that are connected and/or interrelated in both cause and effect.

Ageism is a key factor in preventing counseling professionals from entering into careers that involve working with older adults (Rosowsky, 2005). Narrowly defined, ageism is similar to other “-isms,” such as sexism and racism, because younger groups of people use stereotyping, prejudice, antilocution, avoidance, and discrimination when interacting with aging individuals

(Butler, 2006; Bytheway, 2005; Rupp, Vodanovich & Credé, 2005). However, broadly defined, ageism differs from other forms of prejudice and discrimination because it focuses on how people vary as a result of the aging process, which applies to everyone regardless of other differences such as sex or ethnicity. This means that we all face the possibility of experiencing ageism at some point in our lives. Examples of ageist beliefs that researchers have found to be prevalent include the following: many older people are angry and stingy; older people should not be trusted to take care of infants; interesting conversations are not possible with older people; older adults should be separated from younger people so that they do not bother anyone (Rupp et al., 2005). While such ageist beliefs are obviously prejudice and discriminatory in nature, it should not be assumed by rehabilitation educators that individuals enrolled in graduate level counseling courses do not have such beliefs and therefore do not need educational interventions and/or training designed to change such ideas.

The problems caused by ageism are increased due to the fact that ageism is a relatively recent and subtle concept of which many people are unaware (Bytheway, 2005; Palmore, 2001; Terry, 2008). Unlike sexism and racism, which have been brought into the general public's consciousness through social action campaigns and media coverage, ageism has been mostly ignored; many individuals are unaware of their ageist beliefs, making such beliefs much more difficult to detect (Bytheway, 2005; Rupp, Vodanovich, & Crede, 2005). This makes ageism in action a double-sided phenomenon, with younger individuals projecting the beliefs about older persons (to rationalize their fears of aging) and older individuals projecting their beliefs about younger persons (to diminish their fears of becoming helpless and dependent) (Terry, 2008). Moreover, ageism is based in both negative and positive stereotypes, and although the negative stereotypes have obvious implications on the quality of care older individuals receive, the

positive stereotypes also play a major role in the lack of effective treatments for older adults with disabilities. For instance, as a result of overly positive views of older adults, older individuals may be less likely to be formally diagnosed with a mental health disorder (Kaskie, Wyatt & Imhor, 2008).

Like other forms of prejudice, ageism is based in a lack of knowledge. Research has discovered that most people either know very little about aging and older adulthood or have a lot of misconceptions. Even graduate and professional students, including gerontology students, have been found to have surprisingly high levels of misconceptions about aging. For example, Palmore (1998) found that the graduate students he surveyed missed about one third of the questions on the Palmore Facts on Aging Quiz I. Gellis, Sherman, and Lawrance (2003) found that first-year graduate social-work students had both low levels of knowledge about older adults and the aging process along with very negative ideas about older adulthood. At the current time many graduate students report not having had any aging related graduate courses (Damron-Rodrigues, Villa, Tseng, & Lubben, 1997). Most of the negative ideas held by graduate students are rooted in negative stereotypes based in misconceptions that, if not rectified, often lead to ageist beliefs and discriminatory actions known as ageism. In fact, Palmore (2001) found that the majority of the older adults he surveyed, 77%, perceived ageism as being frequent and widespread. These types of findings led Palmore (1998) to conclude that college level students were not being adequately educated about the basic processes of aging and that there is a great need for formal educational experiences that are specifically designed to teach aging facts. Rehabilitation educators have to take an active role in addressing ageist beliefs early and often in the class room if the goal of training competent, non-ageist, professionals is to be realized.

Summary of the Methodology

This study utilized an educational intervention (see Appendix D) entitled The Truth About Aging designed to provide a thorough overview of age-related issues. A total of forty graduate counseling students enrolled in rehabilitation counseling classes at Arkansas State University in Jonesboro, Arkansas, Alabama State University in Montgomery, Alabama and Southern Illinois University in Carbondale, Illinois were assigned to one of three different groups. The first experimental group (Group B) received an educational intervention lasting around an hour and a half in duration. The second experimental group (Group C) received an educational intervention lasting around an hour and a half followed by a structured discussion lasting around twenty minutes. The control group (Group A) did not receive any educational intervention.

All three groups were tested using the Palmore Facts on Aging Quiz version one in multiple-choice format, the Palmore Facts on Aging and Mental Health Quiz in multiple-choice format, and three exploratory aging related vignettes designed to assess the ability to process the aging related situations presented in the vignettes using factually based knowledge. Following the collection of the data, all demographic variables and research questions for this study were analyzed using the IBM SPSS version 19 (2011) statistical package. Frequency distributions were run on all demographic data with accompanying data ranges and means. All research questions were analyzed using a one-way between subjects ANOVA followed by a Tukey HSD post-hoc analysis.

This study posited the following twelve research questions with corresponding hypotheses and null hypotheses to test whether or not a short educational intervention would have significant effects on the overall aging knowledge of graduate counseling students. Will

the students who receive only the educational intervention (Group B) have higher overall aging knowledge than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have higher overall aging knowledge than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have higher overall aging knowledge than the students who receive only the educational intervention (Group B)? Will the students who receive only the educational intervention (Group B) have higher overall aging and mental health knowledge than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have higher overall aging and mental health knowledge than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have higher overall aging and mental health knowledge than the students who receive only the educational intervention (Group B)? Will the students who receive only the educational intervention (Group B) have lower levels of aging bias than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have lower levels of aging bias than the students who do not receive any interventions (Group A)? Will the students who receive the educational intervention with discussion (Group C) have lower levels of aging bias than the students who receive only the educational intervention (Group B)? Will the students who receive the educational intervention (Group B) have higher overall vignette scores than the students who do not receive any intervention (Group A)? Will the students who receive the educational intervention with structured discussion (Group C) have higher overall vignette scores than the students who do not receive any intervention (Group A)? Will the students who receive the

educational intervention with structured discussion (Group C) have higher overall vignette scores than the students who receive only the educational intervention (Group B)?

Limitations

There are several limitations to this study. One limitation of this study was the lack of a random sample of students. Because two-thirds of this study was conducted outside of the researcher's institution of employment, with the help of colleagues at other institutions of higher education, the fact that they were willing to allow the researcher access to their students was the largest factor in choosing them for the study. The students then were simply placed into a group based on what institution they were in. Silverman and Casazza (2000) argue that students' relationships with their instructor are not collaborative in nature when the students are placed into a group. Furthermore, they contend that when students are placed into groups the instructor is the authority and tends to have the expectation that each group will come to similar conclusions about the material that is being covered (Silverman & Casazza, 2000).

Moreover, the students' motivation in participating in the study could also be a limitation of the research. It should be noted that each student who participated in the study did so voluntarily but also with the understanding that they were eligible for a drawing in which they could have won a \$50.00 gift certificate. It is possible then that the students only took part in the study because they were eligible for financial gain and therefore did not pay as close attention to the educational interventions or the quizzes and vignettes as they could have. Another possibility is that they felt pressured into taking part in the study because they knew that it was for a colleague of their instructor and/or because others in the class were taking part. This too could have played a part in differences in motivation which could then have affected the outcome of the study. In addition, it is possible that the students who volunteered for the study

had more of an interest in learning aging related knowledge than the students who chose not to participate. If differences in student motivation did exist, this could have had an effect on the outcome of the study.

Another limitation in the study is in the possible discrepancy in group formation and data collection. First, Group B consisted of two different classes at Alabama State University, whereas Group C was one class at Southern Illinois University at Carbondale. For Group B, the educational intervention was presented separately to the two classes participating in the study. For Group C, the educational intervention with structure discussion was done during one class period. Doing two separate educational interventions for Group B may have led to a slight discrepancy in the way the material was presented. If a discrepancy in presentation did exist, this could have had an effect on the outcome of the study. Also, while I completed all the educational interventions myself, my colleagues administered the measures after the Group C intervention and the measures for the control group (Group A) at their individual institutions. It is possible that data collection was not done in the exact same way at all three institutions. If data collection was not done the same way it, could have affected the results of the study.

Another limitation of this study was that it did not take into account the ways in which adults learn best. The didactic portion of the educational intervention fell far short of what Cranton (1994, p. 16) referred to as “emancipatory adult learning” or knowledge gained through self-reflection. While it could be argued that the structured discussion that Group C took part in following the educational intervention had some emancipatory aspects, it was not informal or corporative in its approach and it would not be accurate to describe it as “transformative” (Cranton, 1994, p. 16). The majority of the educational intervention used in this study would better be described as “subject-oriented learning” or learning that primarily focuses on the

acquisition of content (Cranton, 1994, p. 10). Some of the problems with this type of learning come from the fact that, while this type of learning may meet the expectations of some learners, it is passive in its approach and therefore may not be an adequate approach to fully engage adult learners, such as the graduate counseling students that were the participants of this study.

Finally, even though the aging related vignettes were intended to only be exploratory in nature, the fact that the aging related vignettes were developed by and graded by me could be brought into question. The basic scale used, 0 points for no use of factual knowledge, 1 point for some factual knowledge used and 2 points for the use of factual knowledge in processing the vignette with factual knowledge may not have been the most optimal way to grade the vignettes. In addition, the fact that the vignettes were not looked over by numerous aging experts for content validity leaves open the possibility that the vignettes may not have addressed the issues that were most important for graduate counseling students to know.

Conclusions

Research Questions 1-3

For the first three research questions, it was hypothesized that both Group B and Group C would have higher overall aging knowledge than the control group (Group A), and that furthermore, Group C, which received the additional structured discussion time after the educational intervention would have higher overall aging knowledge than Group B, which only received the educational intervention. These hypotheses were based on previous research that suggested that educational interventions alone were enough to increase overall aging knowledge. However, the results of the one-way ANOVA and subsequent Tukey HSD post-hoc analysis test on each null hypothesis showed that there was only a statistically significant difference between Group A and Group C and not between Group A and Group B or Group B and Group C. In

other words, only the group of students who received the educational intervention with structured discussion had higher overall aging knowledge than the control group.

Research question 1. With a mean age of 30 for this study (see Table 2) it seems reasonable to conclude that the primary reason that no statistically significant difference between the means of the control group (Group A) and the first experimental group (Group B) in regards to overall aging knowledge was related to the way in which in the aging related material was presented, more specifically the fact that the educational intervention was not designed and presented in a way that was optimal for the adult learners who took part in the study. The lack of a structured discussion following the didactic portion of the educational intervention kept the participants from having the time and opportunity they needed to fully process the material that was presented, and more importantly, make it their own.

Research question 2. It seems reasonable to conclude that the primary reason that there was a statistically significant difference in the means of the control group (Group A) and the second experimental group (Group C) in regards to overall aging knowledge was due to the fact that Group C included the twenty minute discussion following the hour and a half didactic portion of the educational intervention. According to Brookfield and Preskill (2005) using structured discussions in teaching allows students to explore a diversity of perspectives, increases students' awareness of the complexity of the information that has been presented, which in turn may lead them to ask even more questions about the topic of the lesson after the educational intervention is over. Another key advantage that structured discussions have is that they help the students' organize the material into their memories, which could account for Group C's ability to score better on the measures that were given three weeks after the intervention (Brookfield & Preskill, 2005; Welty, 1989).

Research question 3. Due to the fact that the mean Group C was only slightly higher than the mean of Group B in regards to overall aging knowledge, as indicated by a mean difference of (0.08200) it is reasonable to conclude that the possible inconsistencies in how the two separate educational interventions that made Group B were given were not a major reason for why there was not a statistically significant difference between the two groups because if that were the case one would have expected the mean of Group B to be lower. Instead it is more likely that the differences in the educational backgrounds of each of the groups may have been the major reason a difference was not found. For example, seven out of the ten, or 70% of students in Group B reported having had a college level course specifically about aging related issues, and only six out of twelve, or 50% of Group C reported having a college level course specifically about aging related issues (see Table 4). Additionally, eight out of ten, or 80% of Group B reported having other college level courses not specifically focused on aging where time was spent on aging related issues compared to only eight out of twelve, or 67% of Group C (see Table 4). Six out of ten, or 60% of Group B also reported having professional training on aging related issues, but only three out of twelve, or 25% of Group C reported having had such training (see Table 5). Finally, six out of ten, or 60 % of Group B reported that they felt competent in regards to their own aging knowledge and their ability to work with older adults compared to only three out of twelve, or 25% of Group C reporting that they felt competent (see Table 6). Since it is well documented that the only variable that makes a consistent difference in overall aging knowledge is educational level, it is reasonable to conclude that the fact that Group B had more education in regards to aging related knowledge before the study constituted the primary reason for the fact that the group that had the additional structured discussion (Group C) did not score higher than the group who only had the educational intervention (Group B)

(Bressler, 1996; Levy & West, 1985; West & Levy, 1984; Kabacoff, Shaw, Putman, & Klein, 1983; Coe, Miller, Prendergast, & Grossberg, 1982).

Research Questions 4-6

For the next three research questions it was hypothesized that both Group B and Group C would have higher overall aging and mental health knowledge than the control group (Group A), and furthermore, that Group C, which received the additional structured discussion time after the educational intervention, would have higher overall aging and mental health knowledge than Group B, which only received the educational intervention. These hypotheses were based on previous research that suggested that educational interventions alone were enough to increase overall aging and mental health knowledge. However, the results of the one-way ANOVA and subsequent Tukey HSD post-hoc analysis test on each null hypothesis showed that there was no significant difference between the groups for each of the three related hypotheses.

It seems clear now that, unlike the studies I discovered during my literature review, I tried to cover too much information in my very brief, one-and-a-half-hour educational intervention for a statistically significant difference to be found in regards to mental health specific knowledge. For example, even though Cummings, Cassie, Galambos and Wilson (2006) infused aging specific knowledge into an entire semester of bachelor of social work (BSW) and first year master's students (MSW) in social work curriculum they limited their study to only three measures: aging knowledge, attitudes toward older adults, and interest in working with older adults, whereas my study was much smaller in scope (using a one-time educational intervention) to look for increases in overall aging knowledge, increases in overall aging and mental health knowledge, a reduction in negative aging bias, and the ability to read and process three exploratory aging related vignettes using factually based knowledge. Stuart-Hamilton and

Mahoney (2003) used a short-term educational intervention very similar to mine, but only looked at overall aging knowledge and attitudes toward older adults. Olson (2002) used a two-hour educational intervention with BSW and MSW and had similar problems, finding a significant difference in overall aging knowledge, a modest difference in attitudes toward older adults, and no difference in the experimental group's desire to work with older adults in a professional capacity. Based on the previous research and the advantages of hindsight, it seems reasonable to conclude that I made a mistake in trying to cover so much information in such a short amount of time.

Research Questions 7-9

For the next three research questions it was hypothesized that both Group B and Group C would have lower levels of negative aging bias than the control group (Group A), and furthermore, that Group C, which received the additional structured discussion time after the educational intervention would have lower levels of negative aging bias than Group B, which only received the educational intervention. These hypotheses were based on previous research that suggested that educational interventions alone were enough to decrease levels of negative aging bias. However, the results of the one-way ANOVA and subsequent Tukey HSD post-hoc analysis test on each null hypothesis showed that there was only a statistically significant difference between Group A and Group C. In other words, only the group of students who received the educational intervention with structured discussion had lower levels of negative aging bias than the control group.

Research question 7. There are several possible reasons, or combination of reasons, that no significant differences between the means of Group B and Group A were found in regards to negative aging bias. The first reason would be that the educational intervention tried to cover too

much information (26 different aging related topics) (see Appendix B) in too short of a time (an hour and a half), not giving enough factual information that was positive in nature and could therefore offset any negative misconceptions that are at the core of negative aging bias. Another reason for a lack of significance between the means of Group B and Group A could have been the fact that Group B consisted of two separate classes of graduate counseling students, which may have taken away from the consistency of the material presented and therefore the effectiveness of the education intervention. The final reason that no significant difference was found between Group B and Group A could have been the fact that, with a mean age of 30 for the study (see table 2) the way in which the material was delivered in Group B, more specifically by using a didactic lecture format only was not presented in a way that adult learners, such as graduate counseling students, learn best (Cranton, 1994).

Research question 8. It also seems reasonable to conclude that the primary reason that there was a statistically significant difference in the means of the control group (Group A) and the second experimental group (Group C) in regards to negative aging bias was due to the fact that Group C included the twenty minute discussion following the hour and a half didactic portion of the educational intervention which catered more to the learning needs and expectations of the adult learners involved in the study.

Research question 9. While Group C did have lower levels of aging bias scores than Group B as indicated by a mean difference score of (-0.17750) (see table 10), it seems reasonable to conclude that the reason that it did not show statistically significant results at the .05 level of significance, $p=0.066$, $p>0.05$ (see Table 10) is either because, as mentioned earlier, I tried to cover too many topics in too short of time or because Group B was more educated in regards to aging specific knowledge before the study began.

Research Questions 10-12

Finally, in the last three research questions it was hypothesized that both Group B and Group C would be better able to process the three aging related vignettes using factual knowledge than the control group (Group A), and that furthermore, Group C, which received the additional structured discussion time after the educational intervention would be able to process the aging vignettes with more factually based knowledge than Group B, which only received the educational intervention. The results of the one-way ANOVA and subsequent Tukey HSD post-hoc analysis test on each null hypothesis showed that there was no statistically significant difference between any of the three groups.

Because there were no other studies found that attempted to use the ability to process aging related vignettes using factual knowledge gained through an educational intervention as a measure, it is not clear why no statistically significant results were found between the means of the three groups. However, reasons could include, but not be limited to: the way in which the vignettes were designed, the way in which the vignettes were scored, the fact that the educational intervention tried to convey too much information in too short an amount of time and the fact that experts were not consulted in regards to the development of the vignettes.

Overall Conclusions

The most exciting finding of this study was that it proved that a lot can be done in regards to conveying aging related knowledge to graduate counseling students in a very short period of time. The fact that all measures were done three weeks after the educational intervention also showed that the information conveyed was able to be retained. With accredited counseling programs, such as the ones used for this study, being required to cover many other areas of counseling competencies, it is good to know that a significant impact can be made with such a

short-term educational intervention.

The findings of this study also suggest that the use of an educational intervention alone may not be enough to increase overall aging knowledge, increase aging and mental health knowledge, decrease negative aging bias among graduate counseling students. However, it does appear that adding a structured discussion to an educational intervention is an easy way to produce superior results. In addition, it does not appear that using a short-term educational intervention, with or without structured discussion, is enough to impart the level of aging knowledge to graduate counseling students for them to be able to complete a more complicated task, such as processing an aging related vignette using factual knowledge.

Several previous studies suggested that short-term educational interventions alone were enough to increase overall aging knowledge, increase aging and mental health knowledge and decrease negative aging bias among college level students and professionals (Angiullo, Whit Bourne, & Powers, 1996; Cummings et al., 2006; Olson, 2002; Shenk & Lee, 1995; Stuart-Hamilton & Mahoney, 2003). However, no significant differences were found between the means of Group A, the control group, and the means of Group B, the group that received only the educational intervention, in regards to overall aging knowledge, overall aging and mental health knowledge and negative aging bias. In addition, there was no significant difference found between the means of Group A and Group B in regards to the students' ability to process three exploratory aging related vignettes. Also, no significant differences in group means were found between the group of graduate counseling students that received only the educational intervention (Group B) and the group of graduate counseling students who received the educational intervention with structured discussion (Group C). While significant differences were found between the group of graduate counseling students who received an educational

intervention with structured discussion (Group C) and the group of students who received no intervention (Group A) in regards to overall aging knowledge and negative aging bias, the same could not be said of overall aging and mental health knowledge and the ability to process the exploratory aging related vignettes. It seems clear then that the use of a lecture alone or the use of a lecture as the primary source to convey aging related knowledge is not the optimal way to design an educational intervention when educating adults, such as graduate counseling students.

Recommendations

Recommendations Based on Limitations and Conclusions

Due to the significant findings of this study in regards to overall aging knowledge and negative aging bias, it would certainly be appropriate and welcomed for future researchers to use the educational intervention that I developed for this study in their research. It would also be alright if future researchers adapted their educational interventions to be more applicable to students taking graduate counseling classes that have less of a rehabilitation focus and more of a community mental health or social work focus.

Based on the limitations and conclusions of the study I suggest that future researchers make an effort to produce a random sample of participants, eliminate discrepancies in group formation and data collect, develop educational interventions that cover less information and consider the ways in which adults learn, use more powerful statistical techniques, and consult numerous aging experts in developing vignettes and scoring methods for vignettes.

First, I recommend that future researchers make a better effort to create a random sample of participants. Although I had access to a population of graduate rehabilitation students at my institution of employment, I procured the help of colleagues from other institutions of higher education in order to obtain a larger and more diverse population for this study. However, the

subjects were chosen primarily because my colleagues were willing to allow me access to their students. Moreover, students were simply placed into groups based on which institution they attended because multiple trips to conduct multiple educational interventions were not feasible. Creating a random sample in future studies is important because a random sample may have eliminated the statistical discrepancies found between Group B and Group C. That is, if a random sample had been used, Group B might not have consisted of a majority of individuals with higher aging educational levels than the individuals in Group C.

Second, I suggest that future researchers eliminate the discrepancies in group formation and data collection. Inconsistencies in group formation were due to one group consisting of more classes of graduate counseling students than the other two groups. Two of the groups (the control group, Group A, and the second experimental group, Group C) each consisted of one class of students, and one of the groups (the first control group, Group B) consisted of two classes of students. The fact that Group B consisted of two classes of students means that the group received two separate educational interventions (one for each class) instead of one educational intervention like Group C, which consisted of just one class. The fact that Group B received two separate educational interventions may have led to a slight discrepancy in the way the material was presented to this experimental group. Creating a random sample of participants, with groups of equal size and design, would eliminate the possible discrepancies in material presentation. Irregularities also occurred in data collection. Although I personally conducted all the educational interventions, I administered the FAQ1, FAMHQ, and vignettes after Group B received the educational interventions; my colleague at Southern Illinois University administered the FAQ1, FAMHQ, and vignettes after Group C received the educational intervention and structured discussion, and my colleague at Arkansas State University administered the FAQ1,

FAMHQ, and vignettes to the control group, Group A. Since three individuals (two of whom were not actively involved in the study), there is a possibility that data collection was not conducted in the exact same way at all three institutions. To ensure that all data is collected in the same manner, future researchers should actively conduct all steps of the study themselves.

Third, I propose that future researchers use a different method of design when developing the educational interventions. For example, the educational intervention for this study covered a vast amount of information in a brief amount of time. In the hour-and-half educational intervention, I covered numerous issues relating the following topics: the demographics and specific traits of both the current and emerging aging cohorts, as well as the differences between the groups; ageism and the effects of ageism; cognitive, emotional, and physical aspects of aging; mental health as it relates to aging and older adults; and information on how rehabilitation counselors can best work with the aging population. I suggest that future researchers develop educational interventions by doing one of two things. One, future researchers could develop educational interventions that cover less material by focusing on only one measure of the study (increasing overall aging knowledge, increasing aging and mental health knowledge, or lower levels of negative aging bias), or two, future researchers could cover the same amount of material but divide the material into three separate sections, with each section being shorter in duration and covering only information associated with one measure of the study.

Not only should future researchers reformulate the design of the educational interventions they use, if they are studying graduate students, they should also develop the educational interventions to meet the needs of adult learners. Instead of using a majority of the time for lecture, future researchers might want to present a short lecture but spend a majority of educational intervention implementing informal and corporative learning methods that allow for

knowledge gained through self-reflection (Cranton, 1994). For example, future educational interventions could allow more time for students to spend in small group discussions focused on the topics of the intervention.

Fourth, future researchers might want to use more powerful statistical techniques than the one-way between subjects ANOVA. An example would be to use a priori or planned comparison, which would increase the power against the Type II error rate. This is important because the Type II error rate can cause a faulty failing or rejection of a false null hypothesis. Another advantage to using a priori or planned comparison would be that it could lead to a more thoughtful, thorough design of research.

Lastly, if future studies choose to include vignettes to measure students' ability to use factual knowledge in completing more complicated tasks, such as reading and responding to aging narratives, researchers should consult numerous aging experts in the best ways to formulate and score such vignettes. Obtaining professional advice for designing the vignettes would eliminate any discrepancies in content validity by ensuring that the vignettes address the issues that are most important for graduate counseling students to know. Future researchers might also want to procure aging experts to conduct the actual scoring of the vignettes to ensure that they are fairly scored.

Recommendations Based on Future Needs

Based on the literature review, the differences between the current and emerging aging cohorts should be addressed in future educational interventions. At the time of this study, there was not enough data on how ageism will affect the emerging aging cohort. As more data on the Baby Boomer generation emerges, I suggest that future studies develop educational interventions that include information about the emerging cohort's distinct needs and the differences between

the current and emerging cohorts. For instance, when developing educational interventions for future studies, I advise researchers to consider the Baby Boomers' past experiences, their current spending tendencies, their continuing need for individualism as expressed by their narcissistic investment in their stage of life, and their projected resistance to aging, and I recommend that future researchers stress the ways in which this generation differs from their parents' generation in size, life-expectancy, spending habits, religious and social matters, and approach to aging and mental health.

Developing educational interventions that specifically target the emerging cohort is extremely important since ageism plays a major role in the lack of effective treatment available to the current cohort and data projects that ageism will obstruct the future cohort of aging individuals from receiving proper mental healthcare as well. Moreover, based on the characteristics of the emerging cohort, one can infer that ageism could possibly have a deeper impact on this cohort than on earlier aging individuals (Rosowsky, 2005). Because this cohort has chosen to distinguish itself from the previous cohort in all matters from religion to consumer spending habits and has reinvented connotations associated with every age bracket into which it has moved, researchers believe that Baby Boomers who encounter ageism in rehabilitation settings, even in benign and positive forms, will find other outlets for care (Miller & Rehr, 2005).

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APPENDICES

APENDIX A

Palmore Facts on Aging Quiz: Part 1, multiple-choice format.
(FAQ1), (Palmore, 1998)

Instructions: Circle the letter to the best answer.

1. The proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is
 - a. About 1 in 100 +
 - b. About 1 in 10 *
 - c. About 1 in 2 -
 - d. The majority –
 - e. Don't know
2. The senses that tend to weaken in old age are
 - a. Sight and hearing +
 - b. Taste and smell +
 - c. Sight, hearing, and touch +
 - d. All five senses *
 - e. Don't know
3. The majority of old couples
 - a. Have little or no interest in sex -
 - b. Are not able to have sexual relations -
 - c. Continue to enjoy sexual relations *
 - d. Think sex is only for the young –
 - e. Don't know
4. Lung vital capacity in old age
 - a. Tends to decline *
 - b. Stays the same among nonsmokers +
 - c. Tends to increase among healthy old people +
 - d. Is unrelated to age +
 - e. Don't know
5. Happiness among old people is
 - a. Rare –
 - b. Less common than among younger people –
 - c. About as common as among younger people *
 - d. More common than among younger people +
 - e. Don't know
6. Physical strength
 - a. Tends to decline with age *
 - b. Tends to remain the same among healthy old people +
 - c. Tends to increase among healthy old people +
 - d. Is unrelated to age +
 - e. Don't know

7. The percentage of people over 65 in long-stay institutions (such as nursing homes, mental hospitals, and homes for the aged) is about
 - a. 5% *
 - b. 10% -
 - c. 25% -
 - d. 50% -
 - e. Don't know
8. The accident rate per driver over age 65 is
 - a. Higher than those under 65 -
 - b. About the same as for those under 65 -
 - c. Lower than for those under 65 *
 - d. Unknown 0
 - e. Don't know
9. Most workers over 65
 - a. Work less effectively than younger adults -
 - b. Work as effectively as younger adults *
 - c. Work more effectively than younger workers +
 - d. Are preferred by most employers +
 - e. Don't know
10. The proportion of people over 65 who are able to do their normal activities is
 - a. One tenth -
 - b. One quarter -
 - c. One half -
 - d. More than three fourths *
 - e. Don't know
11. Adaptability to change among people over 65 is
 - a. Rare -
 - b. Present among about half -
 - c. Present among most *
 - d. More common than among younger people +
 - e. Don't know
12. As for most old people learning new things
 - a. Most are unable to learn at any speed -
 - b. Most are able to learn, but at a slower speed *
 - c. Most are able to learn as fast as younger people +
 - d. Learning speed is unrelated to age +
 - e. Don't know
13. Depression is more frequent among
 - a. People over 65 -
 - b. Adults under 65 *
 - c. Young people 0
 - d. Children 0
 - e. Don't know

14. Old people tend to react
 - a. Slower than younger people *
 - b. At about the same speed as younger people +
 - c. Faster than younger people +
 - d. Slower or faster than others, depending on the type of test +
 - e. Don't know
15. Old people tend to be
 - a. More alike than younger people –
 - b. As alike as younger people 0
 - c. Less alike as younger people +
 - d. More alike in some respects and less alike in others *
 - e. Don't know
16. Most old people say
 - a. They are seldom bored *
 - b. They are usually bored –
 - c. They are often bored –
 - d. Life is monotonous –
 - e. Don't know
17. The proportion of old people who are socially isolated is
 - a. Almost all –
 - b. About half –
 - c. Less than a fourth *
 - d. Almost none +
 - e. Don't know
18. The accident rate among workers over 65 tends to be
 - a. Higher than among younger workers –
 - b. About the same as among younger workers –
 - c. Lower than among younger workers *
 - d. Unknown because there are so few workers over 65 –
 - e. Don't know
19. The proportion of the U.S. population now age 65 or over is
 - a. 3% 0
 - b. 13% *
 - c. 23% 0
 - d. 33% 0
 - e. Don't know
20. Medical practitioners tend to give older patients:
 - a. Lower priority than younger patients *
 - b. The same priority as younger patients +
 - c. Higher priority than younger patients +
 - d. Higher priority if they have Medicaid +
 - e. Don't know

21. The poverty rate (as defined by the federal government) among old people is
 - a. Higher than among children under age 18 –
 - b. Higher than among all persons under 65 –
 - c. About the same as among persons under 65 –
 - d. Lower than among persons under 65 *
 - e. Don't know
22. Most old people are
 - a. Still employed +
 - b. Employed or would like to be employed +
 - c. Employed, do housework or volunteer work, or would like to do some kind of work *
 - d. Not interested in work –
 - e. Don't know
23. Religiosity tends to
 - a. Increase in old age 0
 - b. Decrease in old age 0
 - c. Be greater in the older generation than in the younger *
 - d. Be unrelated to age 0
 - e. Don't know
24. Most old people say they
 - a. Are seldom angry *
 - b. Are often angry –
 - c. Are often grouchy –
 - d. Often lose their tempers –
 - e. Don't know
25. The health and economic status of old people (compared with younger people) in the year [2020] will
 - a. Be higher than now *
 - b. Be about the same as now –
 - c. Be lower than now –
 - d. Show no consistent trend –
 - e. Don't know

Key: * = Correct answer

+ = Positive bias

- = Negative bias

0 = Neutral

Note: The year in question number twenty-five was changed to 2020 from 2010 due to the fact that this study was completed during the year 2010. It should be noted that this question initially used the year 2000 in first edition (Palmore, 1988) and was changed to 2010 in the second edition (Palmore, 1998). At the date of this research a third edition had not yet been published.

APPENDIX B

Palmore Facts on Aging and Mental Health Quiz, multiple-choice format.
(FAMHQ), (Palmore, 1998)

Instructions: Circle the letter to the best answer.

1. Severe mental illness among persons over 65 afflicts
 - a. The majority -
 - b. About half -
 - c. About 15% to 25% *
 - d. Very few +
 - e. Don't know
2. Cognitive impairment (impairment of memory, disorientation, or confusion)
 - a. Is an inevitable part of the aging process -
 - b. Increases in old age *
 - c. Declines with age +
 - d. Does not change with age +
 - e. Don't know
3. If older mental patients make up false stories, it is best to
 - a. Point out to them they are lying -
 - b. Punish them for lying -
 - c. Reward them for their imagination +
 - d. Ignore or distract them *
 - e. Don't know
4. The prevalence of anxiety disorders and schizophrenia in old age tends to
 - a. Decrease *
 - b. Stay about the same -
 - c. Increase somewhat -
 - d. Increase markedly -
 - e. Don't Know
5. Suicide rates among women tend to
 - a. Increase in old age-
 - b. Stay about the same *
 - c. Decrease somewhat in old age +
 - d. Decrease markedly +
 - e. Don't Know
6. Suicide rates among men tend to
 - a. Increase markedly *
 - b. Increase somewhat -
 - c. Stay about the same +
 - d. Decrease +
 - e. Don't know

7. When all major types of mental impairment are added together, the elderly have
 - a. Higher rates than younger persons –
 - b. About the same rates as younger persons –
 - c. Lower rates than younger persons *
 - d. Higher rates for ages 65 to 74 than for those over 75 0
 - e. Don't know
8. The primary mental illness of the elderly is
 - a. Anxiety disorders +
 - b. Mood disorders +
 - c. Schizophrenia 0
 - d. Cognitive impairment *
 - e. Don't know
9. Alzheimer's disease is
 - a. The most common type of cognitive impairment *
 - b. An acute illness +
 - c. A benign memory disorder +
 - d. A form of affective disorder +
 - e. Don't know
10. Alzheimer's disease usually
 - a. Can be cured with psychotherapy +
 - b. Can be cured with pharmacology +
 - c. Goes into remission among the very old +
 - d. Cannot be cured *
 - e. Don't know
11. Most patients with Alzheimer's disease
 - a. Act pretty much the same way –
 - b. Have confusion and impaired memory *
 - c. Wander during the day or night –
 - d. Repeat the same question or action over and over –
 - e. Don't know
12. Organic brain impairment
 - a. Is easy to distinguish from functional mental illness +
 - b. Is difficult to distinguish from functional mental illness *
 - c. Tends to be similar to functional mental illness +
 - d. Can be reversed with proper therapy +
 - e. Don't know
13. When talking to an older patient, it is best
 - a. To avoid looking directly at the patient -
 - b. To glance at the patient occasionally –
 - c. To ignore the patient's reaction –
 - d. To look directly at the patient *
 - e. Don't know

14. Talking to demented older patients
 - a. Tends to increase their confusion –
 - b. Is usually pleasurable for the patient *
 - c. Should be confined to trivial matters –
 - d. Should be avoided as much as possible –
 - e. Don't know
15. When demented patients talk about their past, it usually
 - a. Is enjoyed by the patient *
 - b. Depresses the patient –
 - c. Increases the patient's confusion –
 - d. Has no effect –
 - e. Don't know
16. The prevalence of severe cognitive impairment
 - a. Is unrelated to age +
 - b. Decreases with age +
 - c. Increases with age after age 45 *
 - d. Increases with age only after 75 +
 - e. Don't know
17. The primary causes of paranoid disorders in old age are
 - a. Isolation and hearing loss *
 - b. Persecution and abuse 0
 - c. Near death experiences 0
 - d. None of the above 0
 - e. Don't know
18. Poor nutrition may produce
 - a. Depression 0
 - b. Confusion 0
 - c. Apathy 0
 - d. All of the above *
 - e. Don't know
19. Mental illness in elders is more prevalent among
 - a. The poor *
 - b. The rich 0
 - c. The middle-class 0
 - d. None of the above 0
 - e. Don't know
20. The prevalence of mental illness among the elderly in long-term care institutions is
 - a. About 10% +
 - b. About 25 % +
 - c. About 50 % +
 - d. More than 75% *
 - e. Don't know

21. Elders tend to have
 - a. Less sleep problems +
 - b. More sleep problems *
 - c. Deeper sleep +
 - d. The same sleep patterns as younger persons +
 - e. Don't know
22. Major depression is
 - a. Less prevalent among elders *
 - b. More prevalent among elders –
 - c. Unrelated to age –
 - d. A sign of senility –
 - e. Don't know
23. Widowhood is
 - a. Less stressful among elders *
 - b. More stressful among elders –
 - c. Similar levels of stress at all ages –
 - d. Least stressful among young adults –
 - e. Don't know
24. Elders use mental health facilities
 - a. More often than younger people –
 - b. Less often than younger people *
 - c. At about the same rate as younger people –
 - d. Primarily when they have no family to care for them –
 - e. Don't know
25. Psychotherapy with older patients is
 - a. Usually ineffective –
 - b. Often effective *
 - c. Effective with Alzheimer's patients 0
 - d. A waste of the therapist's time –
 - e. Don't know

Key: * = Correct answer
+ = Positive bias
- = Negative bias
0 = Neutral

APPENDIX C

Packet Number: _____

Please do not write your name on this form. Your name will be stored separately from any other information that you complete during this study and will not be linked with your responses in any way. The information provided from this sheet will allow the researcher to provide an accurate description of the sample.

For the following items please select the *one* response that is most descriptive of you (place check in blank) or fill in information as instructed.

Sex: female ____ male ____

Age: (please fill in) ____

Ethnicity:

Asian or Pacific Islander ____ Asian/Indian ____ Latino/Hispanic ____

Black/African American (non-Hispanic) ____ Puerto Rican ____

Caucasian/White ____ Native American ____ Other (please fill in) _____

More than one race (please fill in) _____

Please fill in Graduate Major: _____

____ (place check here if not a graduate student)

Please check yes or no to the answers that best describes you:

I have worked with older adults (age 65 and older) in a professional capacity:

____ yes ____ no

I have had a college level course specifically about issues related to older adults:

____ yes ____ no

I have had time taken to address age specific issues in a college level course I have attended:

____ yes ____ no

I have had professional training in regards to working with older adults (outside of college):

____ yes ____ no

I consider myself more competent than most people in regards to working with older adults:

____ yes ____ no

APPENDIX D

Copy of material was presented as Microsoft Power Point presentation.

Slide 1: The Truth About Older Adults

D. Gent Dotson, ABD

Contact information: gdotson@siu.edu

Rehabilitation Institute

Southern Illinois University at Carbondale

Slide 2: Introduction

- ❖ At the turn of the 20th century a person could expect to live to around the age of 47
- ❖ By the beginning of the 21st century the average life expectancy in the United States had increased to:

- 74 years for men
- 79 years for women

In fact, in the year 2000 individuals aged 55 and older made up a total of 56 million people (United States Census Bureau, 2000).

Slide 3: Introduction Cont.

- ❖ In 1997 about 12.8% of the U.S. population was age 65 years and older
- ❖ By the year 2040 it is expected to increase to 21% of the total population (U.S. Bureau of the Census, 1993)

Slide 4: Current aging cohort

- ❖ Made up of two populations:
 - The Silent Generation (born between 1925 and 1945)
 - The Greatest Generation (born between 1901-1924)

- These generations tends to be:
- Conservative (in spending habits and politically)
- Respectful of authority
- Extremely patriotic

(Egri & Ralston, 2004; Thau & Heflin, 1997; Strauss and Howe, 1991)

- Religious

(Gronbach, 2008; Sutherland, Poloma, & Pendleton, 2003)

Slide 5: Emerging aging cohort

- ❖ In 2011 the largest generational cohort in American history (The Baby Boomers) will start entering the 65 and older age bracket.

- ❖ These individuals tend to have:

- Better health than current cohort
- Longer life expectancy

(He, Sengupta, Velkoff, & DeBarros, 2005; National Center for Health Statistics, 2007)

- ❖ These individuals tend to be:

- ❖ Less conservative (in all areas)

(Sutherland, Poloma, & Pendleton, 2003)

Slide 6: Ageism

- ❖ Term was coined in 1969 by psychiatrist Robert Butler to explain why residents in Washington, D.C. were opposed to the construction of public housing for older adults (Bytheway, 2005; Cohen, 2001)
- ❖ Ageism defined:

- A process of systematic stereotyping, prejudice, and/or discrimination against a category of people based on their age (Butler, 2006; Bytheway, 2005; Palmore, 2001)
- Similar to other “isms” such as:
 - Sexism
 - Racism

(Butler, 2006; Bytheway, 2005; Rupp, Vodanovich & Credé, 2005)

Slide 7: Ageism in action

❖ Examples of ageism include:

- Stereotyping (All old people are.....)
- Prejudice (Older people shouldn’t be doing....., because they are.....)
- Antilocution (Old Ms. Daisy is a mess... Note: this could be any negative remark against a person, group, or community not addressed directly at the target)
- Avoidance (Going around older people makes me sad....)
- Discrimination (Older people who are really sick should be last in line for medical care.....)

(Butler, 2006; Bytheway, 2005; Rupp, Vodanovich & Credé, 2005)

Slide 8

Note: The following information presented in this lecture mainly concerns individuals currently 65 years and older. As the emerging cohort of older adults start crossing over into this group you will need to educate yourself more on aging specific knowledge particular them.

Slide 9: General information about older adults

- ❖ Only about 5% of individuals age 65 and older are residents of long-stay institutions (of any kind)
 - ❖ Only about 9% of individuals age 75 and older are residents of long-stay institutions (of any kind)
 - ❖ However, about 40% of older individuals spend time in a nursing home at some point in their lives
- (Kahana, 1995)

Slide 10: General information cont.

- ❖ The majority of individuals aged 65 and older have incomes well above the poverty level
 - ❖ The health and economic status of older individuals in the future is expected to be even higher than it is now
- (Baugher & Lamison-White, 1996)
- This is true despite the fact that most medical practitioners tend to give low priority to the aged
- (Palmore, 1990)

Slide 11: General information cont.

- ❖ Drivers age 65 or over fewer accidents per driver than drivers under age 65
 - ❖ Older individuals have about the same accident rate per 100 persons as middle-aged drivers (13), but have a much lower rate than drivers under age 30
- (National Safety Council, 1996)
- Reason: Older individuals tend to compensate for declines in perception and reaction time by driving more carefully
- (Palmore, 1998)

Slide 12: Cognitive functioning in older adulthood

- ❖ Cognitive impairment does increase as a person ages
- ❖ However, the majority of people aged 65 or over are not senile
- ❖ Community surveys indicate only about 10% of older adults suffer from dementia or severe mental illness
- ❖ Another 10% have mild to moderate cognitive impairment
(Gurland, 1995)
- ❖ There is little or no decline in everyday short-term memory among normally aging adults
- ❖ Problems with long term memory is found in around 10% of older adults
(Kausler, 1995)

Slide 13: Cognitive functioning in older adulthood cont.

- ❖ It does usually take older individuals longer to learn new things when compared to when they were younger
- ❖ However, much of the differences can be attributed to variables other than age such as:
 - Illness
 - Motivation
 - Learning style
 - Lack of Practice

(Poon, 1995)

Slide 14: Physical aspects of aging

- ❖ Physical strength does declines as a person ages
- ❖ Around one third of muscle mass is lost by the age of 80

(Tonna, 1995)

- ❖ All five senses decline as a person ages
(Schiffman, 1995)
- ❖ Lung capacity declines as a person ages
(Pierce, 1995)
- ❖ The reaction time of most older adults is slower than younger adults
(Cerella, 1995)

Slide 15: Physical aspects of aging cont.

- ❖ However, more than 85% of older adults are healthy enough to perform the basic activities of daily living such as:
 - Eating
 - Bathing
 - Dressing
 - Etc.
 - In fact, only about 5% of individuals over 65 are institutionalized and another 5-8% are in need of non-institutional help with task of daily living
(Wiener et al., 1990)

Slide 16: Older adults and sex

- ❖ The majority of individuals aged 65 and older continue to have both interest in and the capacity for sexual relations
(Starr, 1995)
- ❖ In fact, the Duke Longitudinal Studies found that sex continues to play an important role in the lives of most people through the seventh decade of life and that sex after the age of 60 is as satisfying or more satisfying than it was when they were younger

(Palmore, 1981)

Slide 17: Emotional aspects of older adulthood

- ❖ Most older adults DO NOT feel miserable the majority of the time
- ❖ Studies of morale, happiness, and life satisfaction have found:
 - No significant difference by age group (or)
 - About one fifth to one third score “low” on various happiness or morale scales
 - In a national survey one-third of persons age 65 or over
 - reported “These are the best years of my life”
 - Another half reported “I am just as happy as I was when I was younger”

(Okun, 1995; Palmore, 1981; Harris, 1981)

Slide 18: Emotional aspects of older adulthood cont.

- ❖ The majority of older adults say that they are seldom irritated or angry
- (Palmore, 1981)
- ❖ Self-reports of anger tend to decrease with age
- (Barefoot, 1995)
- ❖ The majority of older adults say they are seldom bored
 - In fact, only 21% say that “most of the things I do are boring or monotonous” and only 17% say that “not [having] enough to do to keep busy” is a problem they have

(Harris, 1981)

Slide 19: Social aspects of older adulthood

- ❖ Older adults are NOT all alike

- ❖ There is at least as much variation among older individuals as there are in any other age cohorts

- ❖ Variation include:

- Rich and poor
- Happy and sad
- Healthy and sick
- High and low intelligence

(Palmore, 1981)

Slide 20 : Social aspects of older adulthood cont.

- ❖ Most older people are NOT socially isolated

- About two thirds live with their spouse or family

(Coward & Netzer, 1995)

- Most have close relatives within easy visiting distance, and have relatively frequent contact with them
- Only about 4% of older adults are extremely isolated and for most of these individuals have had lifelong histories of withdrawal

(Kahana, 1995)

Slide 21: Older adults and change

- ❖ The majority of older adults adapt well to change
- ❖ Research has shown that older adults DO adapt to many of the changes of older age such as:
 - Retirement
 - Children leaving home

- Widowhood
- Moving to new homes
- Serious illness

(Cutler, 1995)

Slide 22: Older adulthood and work

- ❖ Most older workers can work as effectively as younger workers

(Rix, 1995)

- ❖ With older workers you get:

- Consistency of output tends to increase
- Less job turnover
- Fewer accidents
- Less Absenteeism

(Labouvie-Vief, 1985)

- ❖ Over three fourths of older adults are working or would like to have some kind of work to do

(Harris, 1981)

Slide 23: Older adults and religion

- ❖ Older individuals do NOT tend to become more religious as they age, but it is true that the present generation of older adults tend to be more religious than younger generations
 - This appears to be a generational difference rather than an aging effect

(Levin, 1995; Blazer & Palmore, 1976)

Slide 24: Aging and mental health

- ❖ The majority of individuals over the age of 65 do not have any mental illness

- ❖ About 15-25 % are severely mentally ill (SMI)
 - Cognitive impairment is the primary mental health problem of older age
 - NIMH studies have found that about 14% of the elderly had mild cognitive impairment, and about 4% have severe cases
- (U.S. Senate Special Committee on Aging, 1991)

Slide 25: Aging and mental health cont.

- ❖ The NIMH also found that individuals age 65 and older had the lowest overall prevalence rates mental impairment when the eight most common disorders were grouped together:
 - Affective disorders(having pervasive alteration in mood)
 - Panic and/obsessive disorders
 - Compulsive disorders
 - Substance use disorders
 - Somatization disorders (unexplained physical or somatic probs.)
 - Antisocial personality disorders
 - Schizophrenia
 - Phobia
 - Severe Cognitive Disorders

(Blazer & George, 1995; Myers et al., 1984)

Slide 26: Depression in older adulthood

- ❖ Major depression (clinical depression) is less prevalent among the elderly than among younger persons
- ❖ NIMH found that major depression was half as prevalent among those over age 65 as in the general population

(Myers, et al., 1984)

Note: Poor nutrition may cause psychological symptoms such as: depression, confusion, and apathy

(George, 1995)

Slide 27: Suicide in older adulthood

- ❖ Suicide rates DO NOT increase with age among women
 - ❖ Suicide rates increase **MARKEDLY** for older men, doubling between the ages of 40 and 75.
 - ❖ Older men tend to use more violent and successful ways of suicide (such as using a gun)
- (Atchley, 1996)

Slide 28: Did you know?

- ❖ Studies have found that widowhood is less stressful for older women than for younger women
- ❖ Reasons for this include:
 - Widowhood is not as stressful when it is expected
 - Younger widows face more problems with childcare, returning to work, and seeking another partner
 - Older widows can find more peer support

(Lopta, 1995)

Slide 29: Sleeping patterns in older adulthood

- ❖ Older individuals tend to have more problems with sleep than younger persons
- (Woodruff-Pak, 1995)
- ❖ Reasons for this include:

- It takes older individuals longer to fall asleep
- Deep sleep (stage 4 sleep) virtually disappears
- Older individual tend to awaken more frequently

Note: These problems are more severe among older individuals with a mental health diagnosis

(Palmore, 1998)

Slide 30: Anxiety disorders and schizophrenia in older adulthood

- ❖ The prevalence of anxiety does not increase, but rather decreases with age
- ❖ Research suggest that many individuals with these disorders either get better as they age, or do not survive to old age.

(Gurland , 1995)

Slide 31: Dementia in older adulthood

- ❖ The prevalence of severe cognitive impairment increases from less than 1% for persons under age 45 to about 4% for those over 65
- ❖ About three fourths of residents of nursing homes have dementia alone or in combination with other mental disorders such as:

- Depression
- Anxiety
- Withdrawal

(Mitty, 1995)

Slide 32 : Organic brain impairment in older adults

- ❖ The symptoms of organic brain impairment are difficult to distinguish from those of functional impairment (such as the affective or anxiety disorders) due to:

- Ambiguous diagnostic criteria
- Inadequate assessment techniques
- Other disease that can mask or mimic mental symptoms

(Reisberg, 1995)

Note: Although accurate diagnosis is difficult, it is critical, because recovery from reversible illness may depend on prompt and appropriate treatment (Palmore, 1998).

Slide 33: Paranoid disorders in older adulthood

- ❖ Delusions of persecution or grandiosity (aka Paranoid disorders) tend to occur in old age under adverse conditions such as:

- Imprisonment
- Institutionalization
- Isolation
- Disfigurement
- Infection
- Intoxication
- Blindness

NOTE: Misinterpretation of words and sounds are primary causes

(Butler, 1995)

Slide 34: Alzheimer's disease in older adulthood

- ❖ Alzheimer's disease (progressive senile dementia) is the most common cause of chronic cognitive impairment in old age (Reisberg, 1995)

- ❖ The essential features of Alzheimer's are:
 - Slow onset of dementia
 - A progressive deteriorating course
 - By definition, there is no cure for Alzheimer's disease because it is progressive senile dementia. If the dementia is cured, it was not Alzheimer's disease
- (Palmore, 1998)

Slide 35: Alzheimer's disease in older adulthood cont.

- ❖ There is great variation in the symptoms exhibited by Alzheimer's disease (Mace & Rabbins, 1991) Some may:
 - Have obvious deterioration in memory and thinking (others are able to hide these impairments)
 - Wander during the day (others may wonder at night or not at all)
 - Lose things (others hide things but can remember where they hid them)
 - Repeat the same question over and over (most do not)
 - Complain or insult their caretaker (others behave reasonably)

Slide 36

Note: The only thing all individuals with Alzheimer's have in common is confusion and impaired memory.

Slide 37: Working with older adults

- ❖ Research has shown that psychotherapy is effective with older patients (Lakin, 1995)
- ❖ However, psychotherapy with older patients should:
 - Be more focused and specific
 - Be more present oriented

- Use a more active therapist role

(Palmore, 1998)

- ❖ Despite these facts older adults use mental health facilities at much lower rates than younger persons (Butler, 1995)

Slide 38: Working with older adults cont.

- ❖ Talking and listening are two of the more pleasurable activities that the patient can share with others (and it does not matter what is talked about, as long as the older person enjoys the interaction)

(Mace & Rabbins, 1991)

- ❖ Talking about their past is usually enjoyed by older patients (This can be precipitated by looking at pictures with the client)

(Mace & Rabbins, 1991)

Slide 39: Working with older adults cont.

- ❖ It is best to look directly at older patients in order to establish eye contact (unless the client is from a culture where this is frowned upon). This helps to build rapport and allows you to see if the client is paying attention to you (Mace & Rabbins, 1991)
- ❖ Telling older patients that they are lying is NOT an effective way of reducing false stories. Older patients are usually NOT lying in the sense of deliberate deception (Mace & Rabbins, 1991)

Slide 40: Discussion

- ❖ What can you tell me about ageism?
- ❖ What can you tell me about the economic status of older adults?
- ❖ What can you tell me about the cognitive status of older adults?

- ❖ What can you tell me about the physical aspects of older adulthood?
- ❖ What can you tell me about the emotional aspects of older adulthood?
- ❖ What can you tell me about older adulthood and work?

Slide 41: Discussion Continued

- ❖ What can you tell me about aging and mental health?
- ❖ What did you learn about working with older adults in a professional capacity?
- ❖ Overall, what did you learn that you did not know?

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APPENDIX E

Vignette #1

Frank is an 89-year-old World War II Veteran and a retired electrician. Except for some mild back pain, he is in otherwise good physical health for his age. Seven months ago, he lost his wife, Emma Jean; they had been married for 67 years. He currently lives alone but pays someone to help him keep up his home. Lately, Frank isolates himself to his living room except for an occasional trip (once every two or three weeks) to a nearby restaurant to have coffee with some longtime friends. Before Emma Jean's death, Frank would go to the restaurant for coffee as much as five days a week, and until around two years ago, Frank was active in a local hunting club and a Masonic Lodge. Now, when Frank goes to have coffee with his friends, he spends most of the time silently looking at his coffee. When he does speak, he frequently mumbles obscenities and accuses the restaurant of changing its coffee brand (which it has not). Frank's daughter, Linda, is very concerned about her father and feels that he may need professional help. She tells her brother, Stephen, that the last time she visited their father he had a handgun sitting on the coffee table in the living room. Stephen tells his sister that she is over reacting and that their father has told him in the past that he didn't think that his neighbors were very good people and that the gun was probably out for protection. He also reminds her that their father has always been "a bit of a loner" and "a little on the grumpy side."

What do you think about Frank's situation?

Stereotypical answers will downplay any clinical issues such as depression or that he may be having suicidal ideations and will see Frank's behavior normal for his age. Stereotypical answers may also lead the reader to think of Frank as just a "grumpy old man".

The facts:

- (1) It is not normal for Frank to feel sad or miserable most of the time. Research shows that most older adults do not feel this way and that they actually have superior emotional regulation skills than younger adults (Ready, Marquez & Akerstedt, 2009; Okun, 1995; Palmore, 1981; Harris, 1981). In addition, research shows that the majority of older adults are seldom irritated or angry (Palmore, 1981) and that self reports of anger tend to decrease with age (Barefoot, 1995).
- (2) It is not normal for Frank to be isolated. Only around 4% of older adults are extremely isolated and most of those individuals have had lifelong histories of withdrawal (Kahana, 1995), which Frank does not.
- (3) The death of his wife is probably not the only reason for Franks' change in behavior. Research shows that the majority of older adults adapt well to changes, including the death of a spouse (Torges & Stewart, 2008; Cutler, 1995).
- (4) Frank's behavior is consistent with depression and the gun nearby coupled with those symptoms should be taken very seriously. It is known that suicide rates markedly for older men and those older men tend to use more violent and successful ways of suicide (such as a gun) (Garand et al., 2006; Atchley, 1996).

Vignette #2

Alice is a 69 year old widow. Her husband of 48 years died a little over one year ago. Though trained as a nurse, Alice never worked outside of the home at the insistence of her husband who wanted her to stay home and raise their five children while supporting him in his preaching career. Alice never complained about not working outside the home and seemed to genuinely love her role as the preacher's wife. Around 8 months ago Alice's behavior started to

change. She stopped attending church services and started spending most of her time in her garden or painting water colors. Around 4 months ago Alice met Jim, a retired college professor from the local university, at a water painting class at the local arts guild. She liked him right away. He started inviting her out to dances on Friday nights at the local VFW and even talked her in to riding with him on his motorcycle a few times. Alice has recently been seen out with Jim at a local restaurant having a mixed drink. Alice's oldest daughter Kimberly is appalled by her mother's behavior and worries that she "might be losing her mind." Another daughter, Amanda, has spoken with her siblings about the possibility of getting together to do an intervention in order to tell their mother that they do not think that her relationship with Jim is good for her. Alice's youngest daughter, Willow, tells her sisters that they are over reacting. Willow explains that their mom told her that she is happier than she has ever been in her life; therefore, they should happy for her.

What do you think about Alice's situation?

A wide range of stereotypical beliefs may show in the research participants' answers to this vignette. Though sexism may also play a role, the real test is to see whether or not the reader is able to discern that there is nothing wrong with Alice's behavior and that it may in fact be very healthy. One common misconception that may be represented is that people tend to get more religious as they age. In addition, the reader may not believe that Alice is capable of being truly "happy."

The facts: The majority of older adults adapt well to major changes, such as widowhood (Pinquart & Sorensen, 2001; Cutler, 1995). Older women actually handle widowhood better than younger women (Lopta, 1995). Though the current cohort of older individuals is more religious than younger cohorts, they do not become more religious as they age (Phillips et al.,

2009; Levin, 1995; Blazer & Palmore, 1976). Finally, it is not atypical for a woman of Alice's age to see her older years as being some of the best times of their lives (Okun, 1995; Palmore, 1981; Harris, 1981).

Vignette # 3

Byrdia is a 96 year old resident in a nursing home. She has been living in the nursing home for approximated 8 months. Byrdia is a retired seamstress and homemaker who is also well known in her small community for being an excellent dessert maker. In fact, the day she fell and broke her hip, leading to her admittance into the nursing home she was making a coconut cake for a neighbor, who frequently bought cakes from her for \$10.00 a piece. Byrdia's husband, Don, passed away over 20 years ago. She has one son, Jim, who is a retired pharmacist. Due to his own failing health Jim is only able to visit his mother on average twice a month. On most days Byrdia stays in her room, sitting in her reclining chair unable to watch television due to her failing eyesight and unable to listen to the radio because of problems with her hearing. She will occasionally leave her room to go with the other residents into a living room where they play bingo, but usually she insists on staying in her room because she says her back hurts. Byrdia loves to visit with anybody who comes to see her although she lets them know that they have to sit very close to her so that she can hear. Some of the nursing home staff try to encourage Byrdia to take a more active role in nursing home activities because they fear that she may get depressed; however, Byrdia tells them that she is not sad but rather that she hurts a lot and that it "wears her out" to go too many places.

What do you think about Byrdia's situation?

This vignette may be a little tricky for the simple reason that it seems as if something really bad may be going on when there actually is not. The key here is the advanced age of the person

presented and the fact that she has multiple physical problems that will in all likelihood be with her for the rest of her life. Negative stereotypes of older adults being sickly or needy can lead to people taking paternalistic view professionally (such as the nursing home staff trying to force her to do things she does not want to do). The important thing to remember here is that Byrdia is an adult, with no indications of cognitive impairment, and that she can and should be allowed to make her own decisions.

The facts: Physical strength does decline with age. Around one third of muscle mass is lost by the age of 80 (Tonna, 1995). All five senses decline as a person ages (Schiffman, 1995). Lung capacity declines (Pierce, 1995). The fact that Byrdia enjoys interacting with people, so long as she does not have to be active, which she says hurts her, indicates that a depression diagnosis is more than likely not warranted.

APPENDIX F

Aging Vignettes

Score: 0= unable to use factual knowledge, 1= able to use some factual knowledge, 2= able to use factual knowledge.

A-01 Vignette # 1 response:

“Frank is lonely and may be experiencing some types of hallucinogens because of all he has been through. Although he is only trying to protect himself, he may not need to have a gun around because of his emotions he is experiencing. He does not need to be isolated. He may also be suffering from Alzheimer’s disease.”

Score: 1

This answer reflects a level of factual knowledge as it is understood that Frank’s situation is very serious. While it is true that Frank does not need to be isolated and that he is seriously depressed and possible suicidal, there is no factual reason to believe that he has Alzheimer’s Disease.

A-01 Vignette # 2 response:

“Seems as if Alice has a new outlook on life! Her children act as if they want her to shrivel up and be alone. They should not want her to be alone and should be glad that she is living life to the fullest with someone who cares. She may have stopped attending church and other things because those were things she love to do with her husband; and since he is gone, she has lost the love for those activities. She may go back to them later, but she is happy.”

Score: 2

This answer focuses on the fact that older adults can be happy and can adapt well to change.

A-01 Vignette # 3 response:

No response

Score: 0

Since the directions stated to answer all three vignettes it appears that the participant was unable to use any factual knowledge to process this vignette.

Total Score: 3

A-02 Vignette # 1 response:

“This is usually what they do when significant other passes on. However, he seems lonely use someone to talk to.”

Score: 0

This answer is high in negative stereotyping and fails to show understanding of the significant clinical issues facing Frank.

A-02 Vignette # 2 response:

“The lady probably shouldn’t have stopped going to church, but it is ok to start dating again. Sounds like her daughter need some assistance.”

Score: 0

This answer fails to use any factual knowledge, but instead gives the readers opinion that Alice “probably should not have stopped going to church” which also ignores her autonomy.

A-02 Vignette # 3 response:

“Maybe if someone would ask her what would please her and then assist or bring the excitement to her and see how that goes.”

Score: 0

This answer does not consider the fact that the client is not depressed and does not seem to require any excitement.

Total Score: 3

A-03 Vignette #1 response:

“He suffers depression due to his loss and he is experiencing old age issues and what comes with being old.”

Score: 1

While this answer understands that there is a clinical issue (depression) it does not show and understanding of how significant it is instead using stereotypical language such as “old age issues” that come from being old.

A-03 Vignette # 2 response:

“Alice could be experiencing depression and her loss played a role in how she has been functioning in life. She gave up her hobbies and does not have the drive to live life to the fullest.”

Score: 0

There is no reason to think that Alice is suffering from depression and she does in fact seem to be enjoying her life very much.

A-03 Vignette # 3 response:

“She is just experiencing the loss and life of being placed in the nursing home. She has lost a form of her independence and poor health problems are coming into play.”

Score: 1

While this answer does acknowledge the fact that Byrdia is having health problems, there is no reason to think that she is not taking part in the nursing home activities due to the sadness of being in the nursing home.

Total Score: 2

A-04 Vignette #1 response:

“I think he is depressed due to the loss of his wife. He needs to attend counseling and maybe join a support group. And I think that he may have a mental disorder like anxiety (besides the depression).”

Score: 2

This answer shows an understanding that Frank has very serious mental health issue for which he needs both professional and peer support.

A-04 Vignette #2 response:

“I think she is just enjoying life and that nothing is wrong. Maybe her husband told her that he wanted for her to not be depressed and to live her life.”

Score: 2

This answer acknowledges that there is nothing wrong with Alice’s behavior and that, like most other older adults, she is happy with her life.

A-04 Vignette 3 response:

“I think that she needs to see a doctor in regards to her health problems. She does not seem to be depressed, just in pain.”

Score: 2

This answer does a good job of only seeing a problem where there actually is one. Byrdia is in failing health, but not clinically depressed.

Total Score: 6

A-05 Vignette #1 response:

“Frank could use mental health counseling. He is likely depressed. He many need to learn to develop new patters in order to find social interactions.”

Score: 2

This answer shows an understanding of the underlying clinical issue (depression) going on with Frank.

A-05 Vignette #2 response:

“Alice is fine and has simply found new and exciting things to do with her life. She appears to be happy and doing fine.”

Score: 2

This answer keeps it simple. There is nothing wrong with what Alice is doing.

A-05 Vignette #3 response:

“Byrdia should be assisted in finding medical help for her pain. This may help in increasing her sociability. It does not seem that she is depressed right now, but interventions to help her with her failing health should be of importance.”

Score: 2

This is a very thoughtful response shows an understating of the issues of Byrdia’s failing health, but does not use stereotypical ideas.

Total Score: 6

A-06 Vignette #1 response:

No response

Score: 0

Unable to use factual knowledge to process vignette.

A-06 Vignette # 2 response:

No response

Score: 0

Unable to use factual knowledge to process vignette.

A-06 Vignette # 3 response:

No response

Score: 0

Total Score: 0

Unable to use factual knowledge to process vignettes.

A-07 Vignette # 1 response:

“I think Frank is depressed. He lost his best friend in life of 67 years. Frank may feel that he has no reason to go on in life without he wife Emma Jean. Frank most likely does need some professional help to get him through the grieving process of losing his wife.”

Score: 2

This answer acknowledges the fact that Frank is depressed and needs some professional help.

A-07 Vignette # 2 response:

“People deal with depression differently. I think Alice quit attending church services because it reminded her of her late husband. She found other ways to cope with her depression by

expressing her artistic side. In my opinion, Jim is not bad for Alice. He is allowing her to bring out her adventurous side which may have saved her life.”

Score: 1

Although this answer does acknowledge the fact that Alice’s current behavior is healthy, there is no reason to think that she has been depressed.

A-07 Vignette # 3 response:

“Byrdia is most likely telling the truth. She probably is in a lot of physical pain and gets tired since she is 96 years old. I think it’s a good sign that she loves to visit with anybody. Most people who are depressed do not care much for visitors and are bitter towards them.”

Score: 2

This answer acknowledges the fact that Byrdia is not depressed and is doing as well as can be expected at her age and with her chronic pain.

Total Score: 5

A-08 Vignette # 1

“Depressed, isolated, suicidal, lost hope.”

Score: 2

This answer keeps it very simple but addresses the reality of the situation.

A-08 Vignette # 2

“Good rebound. Not happy to be widowed, but a huge weight lifted.”

Score: 2

This answer shows an understanding that Alice is doing well.

A-08 Vignette # 3

“Ready to sit down and rest.”

Score: 1

This answer follows the other two in brevity, but fails to show a clear understanding of what is going on in the vignette.

Total Score: 5

A-09 Vignette # 1

“Frank is possibly dealing with some kind of cognitive issues and depression. He should seek help.”

Score: 2

This answer shows an understanding that there are some very serious clinical issues going on and that Frank needs to seek help.

A-09 Vignette # 2

“Alice should seek help for family issues and possible family therapy.”

Score: 1

While it is true that some of Alice’s children have issues with her new lifestyle, this answer ignores the most important facts (that Alice is healthy and happy with what she is doing).

A-09 Vignette # 3

“They should encourage her to interact with others but should let it be her choice to go out. “

Score: 2

This answer does a good job of focusing on Byrdia’s independence and autonomy, while also showing an understanding that isolation can lead to psychological problems.

Total Score: 5

A-10 Vignette #1

“I feel Frank is experiencing loneliness and paranoia. Frank might need his children to have him taken into a mental health clinic for evaluation and maybe a home-health aide to come around for a comfort and assistance.”

Score: 2

This answer shows an understanding of the seriousness of Frank’s situation and acknowledges the fact that he needs professional help.

A-10 Vignette #2

“I feel Alice is experiencing a time in her life when she is reacting to a situation out of reflect. Alice’s family should intervene and let her know that they are concerned about her behavior, health and safety before she ends up in a bad situation.”

Score: 0

This answer makes a problem out of Alice’s new behavior when there is most certainly not one.

A-10 Vignette #3

“I feel Byrdia is showing withdrawal from others and uses her failing health as excuses to not interact with others. Byrdia’s family should come together more so they can visit her more to boost her self-esteem.”

Score: 0

This answer shows a lack of understanding in terms of what it is to be 96 years old with chronic pain. It neglects to show an understanding of the importance of Byrdia’s personal autonomy.

Total Score: 2

A-11 Vignette #1

“He is still grieving and may be experiencing some depression.”

Score: 2

This answer is basic, but shows a clear understanding of what is going on with Frank.

A-11 Vignette #2

“She may be experiencing a life change.”

Score: 1

While it is true that Alice is going through many changes in her life, this answer does not show a clear understanding that she is in fact doing very well.

A-11 Vignette #3

“She may be dealing with pain from arthritis.”

Score: 1

This answer acknowledge Byrdia’s chronic pain issues, but does not show an understanding that she may be doing the best that can be expected given her situation.

Total Score: 4

A-12 Vignette #1

“I think Frank is depressed. Since his usual schedule changed and 1 out of 2 of the children feel there is a difference, he should seek help. Family sessions could be helpful if the son would participate.”

Score: 2

This answer shows an understanding of what is going on with Frank, while also offering a suggestion for an intervention that could be helpful.

A-12 Vignette #2

“Alice feels free at this point. I don’t think the children should be worried. Alice has been held down to her husband and children until a year ago and has found an outlet. She may have enjoyed her past experiences, but she wants something different now.”

Score: 2

This answer shows a clear understanding that Alice’s behavior is healthy and that nothing is wrong with her.

A-12 Vignette #3

“Byrdia could possibly be depressed since she can’t cook like she could before. But, she may not feel good enough to socialize. The staff should continue to encourage her.”

Score: 1

While it is good to socialize with others and depression should be watched for carefully, the staff should always focus on client autonomy as they encourage her to socialize.

Total Score: 5

A-13 Vignette #1

“He is experiencing depression. He needs help.”

Score: 2

This answer is short and to the point. Frank is very depressed and needs help right away.

A-13 Vignette #2

“Alice does not have a mental illness. Alice has supported her family and done what was best for them for many [years] and finally doing things she wants to do.”

Score: 2

This answer is correct. There is nothing wrong with Alice and she is happy doing what she is doing.

A-13 Vignette #3

“Byrdia has accepted the limitations in life. Byrdia is happy and content in this stage of her life.”

Score: 2

This answer is correct. Byrdia is doing the best she can at this stage in her life.

Total Score: 6

A-14 Vignette #1

“He is depressed.”

Score: 2

This answer is correct.

A-14 Vignette #2

“She has moved on with her life and is happy.”

Score: 2

This is a short answer, but shows a clear understanding that it is ok for Alice to move on with her life and be happy.

A-14 Vignette #3

“She may be a little depressed. Being in a nursing home is hard to get used to. She just may need to adjust.”

Score: 1

While Byrdia is at risk to be depressed and it is true that adjusting to life in a nursing home can be difficult, there is no indication in the vignette that she is current depressed.

Total Score: 5

A-15 Vignette #1

“Seems as though Frank is suffering from depression since his wife died. Although he doesn’t go out like he used to, it’s good that he continues to surround himself by other people. I don’t think he’s suicidal but his children should continue to monitor his use of his gun.”

Score: 1

The facts would point to possible suicidal ideations, but it is true that Frank seems to be suffering from depression.

A-15 Vignette #2

“I feel that the other siblings should talk to their mother and realize that she is happy and return to be happy for her as well. Alice seems to be enjoying being with Jim, and I think it’s good that she has something/someone to occupy her time and take her mind off of her deceased husband.”

Score: 2

This answer shows an understanding that the problem does not lie in Alice’s behavior, but rather in some of her children’s reactions.

A-15 Vignette #3

“Byrdia has lived a full life and now she just wants to rest. She may have a small case of depression because she doesn’t see her son that often but for the most part, I feel that she is comfortable with her life at the moment.”

Score: 1

While this answer acknowledges the advanced age of the consumer it also touches on a problem that the consumer does not have (depression).

Total Score: 4

A-16 Vignette #1

“I think Frank is still grieving over the loss of his wife and that he’s just lonely.”

Score: 1

Frank is much more than just lonely, he is in fact clinically depressed and very likely suicidal.

A-16 Vignette #2

“I agree with Willow: the other children are over reacting. They need to allow their mother to enjoy her life. Their mother isn’t hurting anyone or anything. She’s only enjoying life.”

Score: 2

This answer hits the nail on the head. Nothing is wrong with what Alice is doing.

A-16 Vignette #3

“I think the nursing home can come up with some activities that can ensure that Byrdia can participate in other related activities.”

Score: 1

While in room activities may be beneficial, it all depends on what Byrdia wants to do.

Total Score: 4

A-17 Vignette #1

“She should watch him closely because it seems like he is feeling empty and useless and may kill himself.”

Score: 2

Yes, Frank should be watched very closely due to possible suicidal ideations and definite depression.

A-17 Vignette #2

“She seems like she is enjoying herself at an old age.”

Score: 2

While some may take issue with the term “old age”, this response was scored as a two because it acknowledges that fact that her behavior is ok and healthy.

A-17 Vignette #3

“She seems really depressed and needs someone to lift her spirits daily.”

Score: 0

No, there is nothing in the vignette that would point to this consumer being “very depressed”.

Total Score: 4

A-18 Vignette #1

“His situation is that Frank is depressed due to the loss of his wife. He doesn’t feel the need to live life to the fullest because he feels his life is lost without his wife near. I also feel he has contemplated suicide and his family may need to check on him more frequently. I really feel like someone should try and create a more positive atmosphere for Frank in order to make his situation better.”

Score: 2

This is a very in depth and thoughtful response that acknowledges the facts in the vignette and suggest things that could help the situation.

A-18 Vignette #2

“I am happy for Alice. Sometimes a woman can learn to live life without burdening herself with death. I think Alice is doing the right think in enjoying her life as she pleases. Life is too short to be miserable and I feel if this [is] her way of enjoying it then it is no one’s right to tell her anything different.

Score: 2

This is a very thoughtful response that acknowledges the facts in the vignette and shows an understanding that it is ok for Alice to be happy.

A-18 Vignette #3

“I think that Byrdia is doing the best she can at her age. She is still active in trying to do certain recreational activities even with her failing eyesight and hearing. She still likes the company of new people and she seems like she is still full of life to a certain extent. I’m glad the nursing staff try and assist her as much as possible in order to provide her with a positive atmosphere.”

Score: 2

This is a very thoughtful response that does a good job of processing the whole vignette and sticking to the facts.

Total Score: 6

B-1 Vignette #1

“ I feel that Frank needs to see a therapist and I also feel that Frank may be having suicidal intentions. Frank is obviously depressed and should seek help before traumatic issues occur

Score: 2

This response recognizes that it is very important for Frank to seek help for his depression.

B-1 Vignette #2

“I feel that Alice’s relationship with Jim is healthy and should not be tampered with. I believe that Alice has formed a healthy social life with someone who makes her happy.”

Score: 2

This answer recognizes that there is nothing wrong with Alice’s behavior and that it is in fact very healthy.

B-1 Vignette #3

“I believe Ms. Byrdia should continue to be encouraged to participate in activities because they will increase a stable social life for her. Ms. Byrdia seems to be close-minded and afraid of new changes. Staff should continue working with her until she accepts.”

Score: 1

While it is true that participation in activities would help with a Byrdia’s social life, staff should not try to force Byrdia into doing anything that she feels that she cannot do.

Total Score: 5

B-2 Vignette #1

“ I believe Frank is still grieving over his wife’s death. It seems he has been with her for so long that his is lost without her. I think that the kids should pay more attention to their father and if the situation does not get better they should seek out professional health authorities for their father in terms of medical and mental.”

Score: 2

It is true that Frank is still grieving the loss of his wife and that it would not hurt his children to check in with him. Yes, he does need professional help.

B-2 Vignette #2

“I think Alice is just fine. Seems as though she is living out fantasies that she always want to know that her husband is gone and her children are grown. Seems like she never got a chance to do what she wanted to do and what makes her happy. She is just enjoying her opportunity to do so now. I think she will do whatever she want to do and what makes her happy in regards to good judgment, so no worries.”

Score: 2

This is a very thoughtful answer that puts an emphasis on the fact that Alice is healthy and happy and that it is ok for a lady of her age to be doing what she wants to do.

B-2 Vignette #3

“Byrdia seems to be someone who just wants a little people interaction every now and then. She doesn’t seem to be a huge socialite but likes to spend quality time to herself and visit with others or have visitors every now and them. She doesn’t appear to be suffering from depression in my opinion.”

Score: 2

This is a very clear explanation of the facts of this vignette.

Total Score: 6

B-3 Vignette #1

“In Frank’s situation the children should be worried because suicide entities increase in men as they age. The family should think about ways to help him cope with the death.”

Score: 2

This answer clearly uses facts presented in the educational intervention. It is true that older men have an increase in suicidal and the presence of a gun in the vignette is very alarming.

B-3 Vignette #2

“I agree with the youngest daughter’s opinion. I agree because as women age they tend to accept life for what it is.”

Score: 2

This vignette uses facts presented in the educational intervention. Older women do in fact deal with widowhood better than younger women and it is clear from the vignette that Alice is very happy at this point in her life.

B-3 Vignette #3

“In this situation, Byrdia is just doing as she pleases. If she was not isolating herself before she was admitted then maybe she does not want to be bothered. Although that may be a factor, considering that she is in a nursing is important also. She may feel she’s more so in a prison other than a nursing home. “

Score: 2

It does seem clear from the vignette that Byrdia is happy receiving company in her room and that she is being honest with her reasons for not wanting to take part in nursing home activities outside of her room.

Total Score: 6**B-4 Vignette #1**

“Frank may be experiencing depression due to the loss of his wife. He might also have a hard time coping with the changes around him. i.e. his wife being gone; which is also affecting him mentally. These mental changes may include paranoia that something else will ultimately change. It is a way of dealing with his emotions. The statement by his daughter that he has

always been grumpy maybe a reaction (unsettled) to the war. May be known as broken-heart syndrome.”

Score: 2

While the term “broken-heart syndrome” is certainly not a factually based clinical term, it is clear that the reader understood that depression is present in this consumer.

B-4 Vignette #2

“Alice demonstrates great coping skills. She has not become depressed with the loss of her husband by remaining active. She has decided to continue living. To me she might have an outlook that the best way to live is to love. She is expressing herself through the freedom to do things she’s always wanted to do.”

Score: 2

This answer shows an understanding that older individuals can try new things and enjoy their life just like younger individuals.

B-4 Vignette #3

“Depression and isolation is demonstrated in Byrdia’s situation. She may feel alone due to the lack of communication with her family. Not only is family a factor in feeling ‘apart’ from others, she is also losing the ability to see and her people.”

Score: 1

While it is true that Byrdia is isolating herself from out of room activities, it is not true that she is suffering from depression. It is true that losing physical abilities can be very hard on some individuals, it seems that Byrdia has adapted well to her disabilities and is content with her life.

Total Score: 5

B-5 Vignette #1

“I think that Frank is depressed over his wife’s death. I do not think that Frank knows how to cope with losing his wife and his is isolating himself from his normal activities.”

Score: 2

This answer shows an understanding that Frank is suffering from depression and is having trouble adapting to life without his wife.

B-5 Vignette #2

“Maybe Alice is starting over to do the things that she has longed to do for a while. Alice may have conformed her lifestyle to fit the role of a preacher’s wife. Maybe Alice was never truly happy being a stay at home mother and preacher’s wife but just accepted it because she wanted to be supportive of her husband’s wishes.”

Score: 2

It does seem clear that Alice has found a more authentic version of herself and that this fact may be one of the reasons that she is so happy.

B-5 Vignette #3

“I think that Byrdia may not like being around a crowd due to her failing eyesight and hearing impairment. Byrdia may enjoy one on one time with other’s instead of being around a lot of people. She may also be telling the truth with she says that she gets worn out from going out too many times a day.”

Score: 1

This answer starts out with the facts, but hesitates to show a clear understanding that Byrdia is ultimately the one to decide what she wants to do.

Total Score: 5

B-6 Vignette #1

“It does appear that Frank may have some feelings regarding the loss of his wife that he needs to discuss with a counselor. I think he may be experiencing a little/minor depression. He was married to his wife for 67 years. She was most likely his best friend. He has also begun to isolate himself from friends which is not a good sign. I think that Frank should speak with a counselor soon because if his depression is not treated it could lead to suicide.”

Score: 2

This is a very thoughtful response that shows a clear understanding of how serious Frank's situation is.

B-6 Vignette #2

“I believe Alice is sad over the loss of her husband and has decided to move on. Alice is an older woman so she was properly aware that her husband was going to live long which probably prepared her for his death. I think her daughters are over reacting and that they should be happy for their mother. Alice, more than likely, has realized her days are short and is trying to enjoy life to the fullest.”

Score: 2

While this answer borders on the stereotypical, it does show an understanding that Alice is happy with what she is doing and that that is alright.

B-6 Vignette #3

“Brydia's situation is unique. She is probably feeling abandoned. Her husband left her, and her son is not able to visit due to his own health issues. Brydia is lonely. I think she should get involved in more activities at the nursing home.”

Score: 0

This answer is thoughtful, but ignores the fact that Byrdia says that she is happy and that she does not want to take part in nursing home activities.

Total Score: 4

B-7 Vignette #1

“I would not say that Frank needs professional help. If I were Linda, I would suggest Stephen and I visit father more often when should result in father wanting to get out of the house more.”

Score: 0

This answer acknowledges that Frank needs professional help, but does not say for what. It is clear from the vignette that Frank is very depressed and very possibly suicidal.

B-7 Vignette #2

“I believe that there is not a thing wrong with having fun. Willow is right; their mother deserves to be happy and if Jim is keeping her entertained then the other sister’s should not have a problem. Alice is the mother and even if she is going through a mid-life crisis, at least she is having a good time and not depressed.”

Score: 1

This answer acknowledges that Alice is happy, but it also infers that there is a problem with her change in behavior by invoking the term “mid-life crisis”.

B-7 Vignette #3

“I have learned that society believes that old people are miserable unhappy and angry. But if someone was to ask an older person how he or she feels, I am sure that older person would not say depressed or sad or angry. I believe that Bydria really doesn’t want to be bothered with all the [?] and that she enjoys company coming to her more so her going to company.”

Score: 2

This answer does a good job in incorporating information learned in the educational intervention.

It sticks to the fact that Byrdia is the one who should decide what she wants to do.

Total Score: 3

B-8 Vignette #1

“Frank is experiencing widowhood. I think that his actions should be carefully monitored yet understood because he is no longer in a comfort zone because he was use to the order he had with Emma Jean.”

Score: 2

This answer shows a basic understanding of the facts of the vignette and also shows an understanding that Frank needs help.

B-8 Vignette #2

“I think the sisters should listen to Willow and be happy for their mother. The girls should become educated on the effects that widowhood have on couples who have been together for many years. I am happy that Alice is living life for herself.”

Score: 2

This answer shows an understanding that Alice is happy and living her own life and that if her daughters have a problem with it they should seek help for themselves.

B-8 Vignette #3

“I think the staff should allow Byrdia her peace and let the remainder of her life run its course. As long as Byrdia doesn’t complain, I do not see a need to intervene.”

Score: 2

This answer focuses on the fact that Byrdia has the right to live her life the way that she wants to and there is nothing wrong with her not wanting to take part in nursing home activities.

Total Score: 6

B-9 Vignette #1

“Frank is probably depressed from his wife’s death. Frank maybe in the early stages of schizophrenia.”

Score: 1

While it is true that Frank is depressed there is absolutely no reason to think that he may have schizophrenia.

B-9 Vignette #2

“Alice is happy enjoying what she is doing. Alice is enjoying spending time in the garden and painting. Alice’s children should maybe wait to see further behavior.”

Score: 1

It is true that Alice is happy and enjoying what she is doing, there is no reason for her family to keep an eye out for future behavior.

B-9 Vignette #3

“Byrdia should participate in nursing home activities. The therapist should continue to encourage her to participate in future activities.”

Score: 0

Byrdia is not currently working with a therapist.

Total Score: 2

B-10 Vignette #1

“Frank is suffering from deep depression. The signs are as following: he’s isolating himself, he’s grouchy, and he’s probably having suicidal thoughts.”

Score: 2

This answer is very clear. Frank is depressed an very likely suicidal.

B-10 Vignette #2

“Alice’s behavior is due to her inability to cope with the death of her husband. Her actions have changed so that she can learn how to cope with the loss of her husband.”

Score: 0

There is nothing wrong with Alice’s behavior.

B-10 Vignette #3

“Bydia is extremely lonely and she really misses her husband and son. Her pain is causing her to socially isolate herself and it is causing her to decreases her interactions with others.”

Score: 0

Byrdia’s pain may be keeping her from taking part in some nursing home activities, but there is nothing in the vignette to warrant saying that she is extremely lonely.

Total Score: 2

C-01 Vignette #1

“Frank should have a mental health evaluation and a suicide risk assessment.”

Score: 2

It would be a very positive development if Frank had a mental health evaluation and suicide risk assessment.

C-01 Vignette #2

“Alice is enjoying life and adapting to change in a healthy way.”

Score: 2

Yes, Alice is enjoying her life and has adapted to the changes in her life in a healthy way.

C-01 Vignette #3

“Byrdia should be examined by a doctor to see if there is anything they can do to relieve her pain.”

Score: 2

This answer acknowledges that Byrdia’s main issue is her physical pain and not depression.

Total Score: 6

C-02 Vignette #1

“It is possible that Frank is beginning to enter into Alzheimer’s symptoms, but most likely PTSD and depression could account for irritability, mood change and isolation. The depression could be rooted in loss of his spouse.”

Score: 2

While Alzheimer’s is major issue at Franks age and PTSD is possible with him being a WWII veteran, depression is the major issue.

C-02 Vignette #2

“Alice should be left alone to enjoy her life. In the course of her adult life she put other’s wants and needs first, and now she has the opportunity to find activities and interest that she enjoys.”

Score: 2

This answer shows an understanding that there is nothing wrong with what Alice is doing.

C-02 Vignette #3

Being 96 years old, Byrdia may not be able to move around without pain or discomfort, and she would certainly experience decreased stamina. Byrdia's vision and hearing problems make it difficult for her to interact with other residents. The staff should work towards decreasing barriers (mostly vision/hearing) to Byrdia's interacting rather than forcing her to be more active."

Score: 2

This is a very informed answer that does a good job of using the factual knowledge gained in the educational intervention.

Total Score: 6

C-03 Vignette #1

"He is depressed probably since he lost his wife. He is withdrawn, lost interests, isolated. He may have a suicidal ideation evidenced by a handgun in his living room. He needs to see a psychiatrist and a counselor for assessment and treatment."

Score: 2

This answer shows a clear understanding of the issues Frank is dealing with.

C-03 Vignette #2

"She seems to have found her new interests and a potential new partner in her life. It is good sign for her to be enjoying her life."

Score: 2

This answer shows a clear understanding that it is ok for Alice to be moving forward with her life after the death of her husband.

C-03 Vignette #3

“She has a pain on her back and has some physical impairment. However, sitting alone in her room increases a risk of her getting depressed. Staff and Byrdia had better discuss and make a plan how she can enjoy a time with other people as much as possible without increasing a pain.”

Score: 2

While it is true that spending too much time alone can increase the risk of depression, Byrdia is not depressed. This answer does not claim that any problems are present that are not and makes a good suggestion that the staff converse with Byrdia to get a clear understanding of what she wants.

Total Score: 6

C-04 Vignette #1

“Just from reading the passage I think that Frank is depressed about losing his wife that he was of course married to for 67 years. Going to the restaurant probably is a way to remember certain things about her. He can possibly have mood disorders as well because of the randomly going to the restaurant, outbursts, and being a little grumpy.”

Score: 2

This answer shows a clear understanding of the facts related in the vignette.

C-04 Vignette #2

“Alice could possibly be depressed about losing her husband, but because of her “new friend,” Jim, she probably just needed someone to encourage her to go out and do different things. I do not think anything is wrong with her.”

Score: 1

It does seem that her relationship with Jim is healthy and possibly even “encouraging”, but there is no reason to think that she is depressed.

C-04 Vignette #3

No response

Score: 0

Total Score: 3

C-05 Vignette #1

“He is at risk for suicide and he seems to be depressed. Frank needs treatment for his depression.”

Score: 2

It is very good that this answer touches on the most pressing issue first, the fact that Frank may be suicidal and show a clear understanding that Frank is depressed and not just “a little grouchy” as his son said.

C-05 Vignette #2

“I think it is great that she is dating Jim. Her daughters should support her in her newfound happiness.”

Score: 2

This answer shows a clear understanding that it is ok for Alice to doing new things with a new friend and that she is happy.

C-05 Vignette #3

“She needs pain medicine, and a hearing aide, and a prescription for eyeglasses. Also, Byrdia is 96 years old and says she is not sad. She is actually doing very well for her age. She just needs some assistance to help with her pain, her failed hearing and vision.”

Score: 2

This answer acknowledges that Byrdia is at a very advanced age and that assistive devices would be of more help to her than being forced by nursing home staff into doing things that she does not want to do.

Total Score: 6

C-06 Vignette #1

“ I think it probably wouldn’t hurt for Frank to have an assessment. He may or may not have Alzheimer’s or paranoid schizophrenia and sitting around with a handgun is dangerous.”

Score: 1

While it is true that Frank depression needs to be assessed, this answer does not show a clear understanding of his situation.

C-06 Vignette #2

“I think Alice is happy and is not in danger of potential harm, let her be happy.”

Score: 2

Short and to the point, this answer shows an understanding that nothing is wrong with Alice.

C-06 Vignette #3

“I think if Byrdia is happy let her be.”

Score: 2

Short and to the point, this answer shows an understanding that Byrdia is doing well for her age and medical problems and is not depressed.

Total Score: 5

C-07 Vignette #1

“Frank is lonely.”

Score: 1

Yes, Frank is lonely, but there is much more going on with his situation that this answer does not address. Namely, depression and possible suicidal ideations.

C-07 Vignette #2

“Alice might need help.”

Score: 0

There is no reason to think that Alice needs help.

C-07 Vignette #3

“Bydia needs help with being “worn out.”

Score: 1

While getting help with her physical pain would be good, this answer does address the issue of whether or not Byrdia is depressed (which she is not) or whether or not she should be forced by nursing home staff to take part in out of room activities.

Total Score: 2

C-08 Vignette #1

“I think Frank is choosing to isolate as a way of dealing with the death of his wife of 67 years. His actions point to his way of adapting to the situation and it is his way of telling others what is going on in his life. I think he would benefit from speaking to a professional or his family might look into ways of getting him involved in activities in the community again as he used to. He might be depressed as a result of losing his wife and he doesn’t know how to deal with the loneliness or the gap left by the death of his wife.”

Score: 2

This is a very thoughtful answer that shows a clear understanding of the vignette.

C-08 Vignette #2

“It seems like Alice has found some new freedom and new life experiences that differ from her previous life as a housewife and as a preacher’s wife. It would appear that her children are grown up now and her husband is dead and so she is no longer confined to raising her children and supporting her husband’s calling as a preacher and she has decided to live her life differently which I feel is perfectly okay. I just feel sad that she is no long attending church but it could be that she is trying to find herself apart from the previous roles she has played.”

Score: 1

This is a very thoughtful response that does a good job trying to understand what is going on in the vignette. It is never appropriate however to say what is good or bad for a consumer in terms of very personal decisions, such as whether or not they should be attending religious services.

C-08 Vignette #3

“I think she might be avoiding socializing because of her hearing loss. I think she would benefit from talking with a specialist about the possibility of being fitted with a hearing aid. I believe

her talk of hurting is her way of avoiding being in social situations where she can't really hear what is being said."

Score: 1

While it is true that hearing loss may be playing a role in Byrdia's lack of out of the room activities, there is no indications that she is making up excuses not to take part in them.

Total Score: 4

C-09 Vignette #1

"I think Frank is depressed and still grieving about losing his wife."

Score: 2

This answer shows an understanding of the core of Frank's problems (depression).

C-09 Vignette #2

"She has found someone to spend time with. There is nothing wrong with it. She is happy."

Score: 2

This answer shows an understanding that there is nothing wrong with Alice's behavior.

C-09 Vignette #3

"She is in pain and needs to bring it up to a doctor. Pain can seriously affect your mood."

Score: 1

While it is true that Byrdia is dealing with chronic pain, this answer also implies that she is depressed, which she is not.

Total Score: 5

C-10 Vignette #1

“Frank’s situation requires immediate suicide intervention and mental health counseling. Frank needs grief counseling to cope adaptively with the death of his wife and also a social support group and or group counseling that would be appropriate for his population. Frank’s behavior seems to have changes that seem unrelated to grief like accusing restaurant of changing its coffee brand—perhaps Frank is becoming paranoid due to isolation and hearing loss. Frank needs to see an audiologist for a hearing assessment. Moderate exercise should be recommended for Frank since he is in good physical health for his age. This would reduce depression and benefit his physiologically too. So is there history of suicide in Frank’s family?”

Score: 2

This is a very thoughtful answer that shows a clear understanding of the facts presented in the vignette.

C-10 Vignette #2

“Alice is coping well to the loss of her husband and seems to have a desire for an active lifestyle which I believe is positive for Alice. Amanda needs to respect her mother’s autonomy—an intervention is not necessary for Alice. It is positive psychologically for Alice to have a companion. How often does Alice have a mixed drink—when drinking how many drinks does she have—could alcohol interact negatively with any medications Alice may be taking—or is a mixed drink one drink every now and then ok for Alice? This supports that adults who are older state they become happier with age.”

Score: 2

This is a very thoughtful answer that shows a clear understanding of the facts presented in the vignette.

C-10 Vignette #3

“Are there any assistive devices Byrdia can use to accommodate—help increase her eyesight and hearing loss—that needs explored. Byrdia is 96 years old. She may not be depressed at all. At 96 years old being more active could wear her out and exacerbate the back pain she is already experiencing. It would be great if Byrdia got more visitors—some people volunteer to spend time with older adults and someone who works in the nursing home should organize this for her. In the BINGO room, there needs to be a chair specifically designed to help reduce back pain—Byrdia could play bingo in a reclining chair.”

Score: 2

This is a very thoughtful answer that shows a clear understanding of the facts presented in the vignette.

Total Score: 6

C-11 Vignette #1

“—depression caused by grieving his wife’s death.

—Suicidality-men whose spouse passes 1st are more likely to commit suicide

—Isolating himself from others because big part of identity was created through his marriage.”

Score: 2

This answer does a good job of integrating information gathered during the educational intervention.

C-11 Vignette #2

“—Since her personal identity was compromised in the marriage, she is now feeling more free to be herself and do what she likes.

—she is attracting a person with similar interests, which is why she is so happy.”

Score: 2

This answer shows an understanding of the facts presented in the vignette.

C-11 Vignette #3

“—Feeling isolated/dejected from being unable to do activities she enjoys

—loss of identity.”

Score: 0

No, there is no reason to suggest that Byrdia has lost her identity or feels dejected.

Total Score: 4

C-12 Vignette #1

“I think Frank may be suffering from depression. He may be contemplating suicide and I think a professional intervention is necessary.”

Score: 2

This answer shows a clear understanding of the facts presented in the vignette.

C-12 Vignette #2

“Alice is reevaluating her life and is changing her life roles. I don’t think an intervention is necessary.”

Score: 2

This answer shows an understanding that Alice is happy and that there is no reason for her family to intervene.

C-12 Vignette #3

“I think Byrdia may be depressed. She lost everything just about. She only gets to see her son every couple of days. I think she may be bored. She may resist making new friends with fear that they may pass. Perhaps she is experiencing a lot of death...friends and family.”

Score: 0

No, the facts presented in the vignette do not support this answer.

Total Score: 4

VITA
Graduate School
Southern Illinois University

D. Gent Dotson

gdotson@siu.edu

University of North Alabama
Bachelor of Science, General Geography, May 2002

University of North Alabama
Master of Arts in Community Mental Health Counseling, May 2005

Special Honors and Awards:

2007 Guy A. Renzaglia Scholarship, Rehabilitation Institute, Southern Illinois University at Carbondale, Carbondale, IL.

2004 Phi Kappa Phi, University of North Alabama, Florence, AL

2003 Chi Sigma Iota, University of North Alabama, Florence, AL

2002 Kappa Delta Pi University of North Alabama, Florence, AL

2002 Alpha Theta Chi University of North Alabama, Florence, AL

Dissertation Title:

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Major Professor: D. Shane Koch, Rh.D., CRC, CSADC, AADC

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